The bright side of a deadly sin

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The Bright Side of a Deadly Sin
The Psychology of Envy

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The Bright Side of a Deadly Sin
The Psychology of Envy

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Introduction

Dutch education faces a serious problem. A 2007 report concluded that at the high-school level, 75% of the current teacher population will have quit or retired from their jobs in 2016. This is a problem, because becoming a teacher is not that attractive to young people. One of the main causes for the lack of enthusiasm for the job of teacher is the relatively low salary of high school teachers compared to their peers in the commercial sector. The starting wage of a teacher is already low compared to that of their peers, but this difference increases during the first few years when employees in the commercial sector progress quite rapidly in salary, while teachers do not.

In 2008 Ronald Plasterk, the minister of education, culture, and science, wanted to change the payment structure of teachers in an attempt to attract more teachers. In the proposed system, the salary of the younger teachers would progress more quickly than it does now. However, this proposal was never accepted. The reason for this seems ridiculous at first sight: the older teachers (with the back-up of the unions) wanted to be compensated, because the young generation would progress in salary more quickly than they had. The compensation they demanded made the proposal too expensive, and was therefore taken of the table (Reijn, 2008). Finally, an agreement was reached, but in this plan the salary of all teachers increased, not mainly that of the younger ones where the main problem existed.

Why did the older teachers wanted to be compensated for the faster growth in salary for the new teachers? The plan came at no financial cost to them, and their objective situation would in no means be affected by it. So why did they oppose this plan? Could it be that the older teachers reacted as they did because of envy? The older teachers could not cope with the frustrating idea that the younger generation would progress more quickly than they had done. If so, envy and the behavior that follows from it can have a profound influence on people and society. After all, the benefits of the extra spending on education are distributed among all teachers in the

current plan, making it less effective for its main purpose: to attract and keep young teachers.

Without the plan described above, a shortage in teachers remains likely and the quality of Dutch education is at stake. Understanding the determinants and consequences of envy is therefore important. The current thesis investigates the common experience of envy and its consequences, and reveal evidence demonstrating that envy also has its brighter sides.

Envy is "a feeling of discontent or covetousness with regard to another's advantages, success, possessions, etc." (dictionary.reference.com). This rather common emotion (Schoeck, 1969), is also one of the seven deadly sins in the catholic tradition (this list is attributed to Pope Gregory the Great, and eloquently described by Dante, 1310/2003)[1]. When one compares envy to the other six sins (pride, wrath, sloth, greed, gluttony, and lust), it appears that envy differs from the other sins on an important aspect: it is no fun (Silver & Sabini, 1978). What then, is the common denominator that makes envy fit in with these other sins?

I believe that all seven sins are feelings people should not experience, according to catholic ideas of what is important. Whereas the other six are positive feelings that we should not feel (e.g., according to catholic tradition we should not crave for sex, or feel good after revenge), envy is a negative feeling that we should not feel. After all, envy is a frustrating experience that arises from someone else's good fortune, and we should be satisfied with what we have, regardless of what other people have. Envy therefore violates the injunctive norm of what we should feel (we should feel joy, not frustration, after someone else's good fortune). Consider the opening example: the older teachers did not like it that their younger counterparts would be able to progress quicker than they had, even though the new system had no effect on their situation. The older teachers thus violate the injunctive norm, as they feel frustrated due to the better fortune of the younger teachers.

[1] Other major religions condemn envy as well. For example, in the Talmud (Jerusalem Talmud Berachot 4:2) sages pray "let me not be envious of others, and let others not be envious of me." Muhammed is quoted in Abu Daud as having stated "Keep yourselves far away from envy, because it eats up and takes away good actions, like the fire that eats up and burns wood."

Besides violating what we ought to feel, there may be another reason why people across the world condemn envy. Envy is associated with a destructive desire to harm the envied. Consider the definition Schoeck (1969, p. 140) gives of envy: "envy involves the consuming desire that no one should have anything, the destruction of pleasure in and for others, without deriving any sort of advantage from this." Many stories exist that show the destructive nature of envy, with notable examples being Cain killing Abel, and Iago plotting against Othello (with dire consequences). Research on envy indeed confirms that envy can trigger negative behavior, from gossiping about the envied (Wert & Salovey, 2004) to actually paying money to destroy more money of the envied (Zizzo & Oswald, 2001). In the current thesis, the focus does not lie on this destructive side of envy. Instead, I focus on a hitherto rather neglected aspect of envy that can be considered as the brighter side of this deadly sin.

First of all, envy signals to people that they miss something attractive that someone else does have (Hill & Buss, 2008; Salovey & Rodin, 1991). Pulling the other down by engaging in negative behavior is one way to level this difference between oneself and the superior other, but another likely behavioral strategy exists. Instead of wanting to pull down the other, the difference can also be leveled by moving oneself up. If this is the case, envy could be a motivating force as well.

Second, if envy can be destructive, someone who is better off than others might fear being envied. If the envious are likely to behave negatively toward the envied, it seems plausible that the envied would try to prevent or dampen these effects (Foster, 1972). It is hypothesized that a fear of being envied by others will make the potentially envied act more prosocially, in an attempt to ward off these potential negative effects of envy.

The current approach

To investigate these potential bright sides of envy, a social psychological perspective is adopted, an approach that examines the influence of social factors on the individual. This means that I empirically investigate when and how envy is experienced by people, and how this emotion influences

subsequent behavior. In such a social psychological perspective, emotions are viewed as mechanisms evolved by natural selection to help people and animals cope with stimuli from the environment that need their attention (Cosmides & Tooby, 2000). Consistent with this is that a wide range of studies show that envy is a universal and basic emotion; capuchin monkeys (Brosnan & De Waal, 2003) and dogs (Range, Horna, Viranyi, & Hubera, 2009) reject rewards if another animal gets a nicer reward; six-month old babies do not mind when their mother pays attention to a book, but do start crying when their mother pays attention to a life-like doll (Hart & Carrington, 2002); and cross-cultural studies find envy all around the world (Foster, 1972; Schoeck, 1969).

The social psychological perspective sees envy as a universal experience common to all. It does not, however, deny that envy can differ across persons or cultures. For example, research found that some people are more prone to envy than others are (Smith, Parrott, Diener, Hoyle, & Kim, 1999). Furthermore, what elicits envy in one person does not necessarily do so in another: a good karaoke singer is more likely to elicit envy in Japan than in the Netherlands. The social psychological perspective does not deny such differences, but rather emphasizes the commonalities. It assumes that underneath these differences universal features can still be found. For example, as discussed later, envy is more intense for things that provide status. Because in Japan a good performance in karaoke often provides status, and in the Netherlands it usually does not, people will be more envious of a good karaoke performance in Japan

Within the social psychological approach, the study of emotions takes an important place. An emotion is the experience that the situation at hand is important for the organism, and it includes action tendencies that deal with the situation (Frijda, 1986). In other words, when we experience an emotion, this is a signal that something of interest to us is going on. Whereas early emotion research distinguished emotions based on a few dimensions, most typically the valence, the arousal level, and the potency (Wundt, 1896), contemporary emotion research stresses the value of looking for effects of specific emotions. Such a functional account of emotions (Keltner & Gross, 1999; Zeelenberg, Nelissen, Breugelmans, & Pieters, 2008; Zeelenberg &

Pieters, 2006) explains why emotions exist and defines them as responses to problems or opportunities that arise in the environment.

According to a functional view of emotions, each emotion is elicited by a specific set of perceptions of the situation (called appraisals, Frijda, Kuipers, & Ter Schure, 1989). For example, anger arises when someone blames another person for not reaching a desirable goal (Smith & Lazarus, 1993). Furthermore, each emotion has a characteristic experiential content (Roseman, Wiest, & Swartz, 1994), which consists of feelings, thoughts, action tendencies, actions, and emotivational goals. For example, when one becomes angry following bad service the action tendencies of aggression and retaliation are activated (Bougie, Pieters, & Zeelenberg, 2003). I adopt such a functional view of emotions, and will study envy from this perspective (the experiential content in Chapter 2, the appraisals in Chapter 3, and the behavioral consequences in Chapters 4 and 5).

In this introduction, a general summary of research and ideas on envy is provided first. The empirical chapters (Chapters 2 to 6) logically follow up on each other, but are also written in a way that allows them to be read individually. To make these chapters as concise as possible, however, I did not include all the important scholarly work on envy in them, but only the research that was of interest to the question of interest in that chapter. Because the chapters follow up on each other quite logically, the chapters can easily be read without this introduction. I do not attempt to provide a complete overview of all the work on envy (and related topics)[2] in this introduction, but rather chose to provide answers to a number of important and basic questions people generally tend to have related to envy. The first question is what envy is, and what it is not. Next, the focus shifts to what typically elicits envy, who elicits envy, and who is likely to experience it. Then, an overview of the empirical work on the behavioral consequences of envy is provided, with an explanation of why it is so important to study this emotion. Finally, an overview of all chapters of this thesis is provided. Let me start by explaining what envy is.

[2] For those with more interest in the psychology of envy, I recommend reading the recent review of Smith and Kim (2007), and the books of Schoeck (1969) and Smith (2008).

Chapter 1.

What is envy (and what is it not)?

Aristotle (350BC/1954) defined envy as the pain caused by the good fortune of others. In his definition Aristotle did not, however, add one crucial component of envy. Kant (1780/1997) argued that it is a comparison of oneself to the superior person that lies at the core of envy. Envy is thus not the pain that arises when others do well, but rather it is the pain that arises when others do *better* than oneself[3]. This is reflected in the definition of envy (Parrott & Smith, 1993, p. 906) that is often used in the social psychological literature: "Envy arises when a person lacks another's superior quality, achievement, or possession and either desires it or wishes that the other lacked it."

If a comparison to another person lies at the core of envy, the literature on social comparisons might help to understand the nature of envy. Research on social comparisons clearly shows that people take others into account when they are evaluating their own opinions and abilities (Festinger, 1954). For example, getting an 8 for an exam is a good accomplishment[4], but if all others only got a 5, an 8 becomes a *very* good accomplishment. Such comparisons often occur outside of our awareness (Mussweiler, Rüter, & Epstude, 2004; Stapel & Blanton, 2004), and they can be either upward or downward: when Rik does better than Marcel, Rik compares downward, when Marcel does better Rik compares upward. Social comparisons can lead to contrast effects (perceiving oneself as relatively dissimilar from the target of comparison) or to assimilation effects (perceiving oneself as relatively similar to the target). Such contrast and assimilation effects exist for both upward and downward comparisons (Buunk, Collins, Taylor, Dakof, & Van Yperen, 1990).

The literature on social comparisons has been linked to feelings and emotions as well, for example in the self-evaluation maintenance model

[3] Note that this might not always appear to be the case at first sight, but closer examination shows that this is always the core of envy. Consider a senior consultant being envious of a junior consultant who is doing well. Although the senior consultant is in the objectively superior position, the senior consultant could still be envious of his junior counterpart. He would, however, not be envious of the position of the junior consultant, but rather of something the junior consultant is actually doing better than he is: maybe her growth potential in the company is better, maybe he is envious of the life she still has ahead of her, or her clever ideas might earn her more respect from clients.

[4] In the Dutch system, grades are typically given from 1 to 10, with a 10 being the highest.

(SEM; Tesser, 1988). One of the key components of emotions is that the intensity of an emotion corresponds to the relevance of the situation at hand (Frijda, 1988), and research on SEM indeed finds that social comparisons in more important domains elicit stronger affective reactions (Tesser & Collins, 1988). As discussed before, work on emotions has shown that it is important to look at specific effects of emotions, and not only at the valence or arousal associated with them (Keltner & Gross, 1999). Although the valence of the experience of a social comparison has been investigated in social comparison research (Brickman & Bulman, 1977; Buunk et al., 1990), more specific emotion aspects received hardly any attention in this domain.

Smith (2000) is an exception, as he developed a model that positioned various emotions along the dimensions of upward/downward comparisons, and contrast/assimilation effects. In this model, envy is an upward contrastive emotion with low perceived control: when a person compares him- or herself to a superior other and feels that the coveted asset can not (easily) be obtained, the person is likely to feel inferior. Because social comparisons and envy are likely to be related, it follows that research on social comparisons can help to understand envy, and that research on envy can help to understand social comparisons. In this thesis, ideas from the social comparison literature are used, and I hope that the findings on envy will be picked up by scholars working in that domain as well.

What is envy not?

Envy is commonly equated to jealousy, but clear differences exist. Whereas envy arises when another person has something that one misses, jealousy arises when a person has something but is afraid of losing it to another person (Neu, 1980). It is common for people to use the term jealousy to indicate envy, and the few available empirical treatments of the experience of envy were aimed at distinguishing those two. Whereas at first the two experiences were thought to be similar (Salovey & Rodin, 1986, 1989), later research found clear differences in the experience of these emotions (Parrott & Smith, 1993; Smith, Kim, & Parrott, 1988). Importantly, Smith et al. also found that the word jealousy was often used to indicate envy, but envy was hardly ever used to indicate jealousy. This suggests that

when participants are asked to recall an instance of envy, they understand what is meant by it and report an instance of envy. When they are then asked how they felt in that situation, however, they are likely to indicate having been jealous.

Envy also differs from admiration and resentment (see also Chapter 2). Envy is an unpleasant, frustrating experience when another person does well. Admiration, however, feels positive (Algoe & Haidt, 2009; Ortony, Clore, & Collins, 1988). Resentment and envy differ on two important aspects (Rawls, 1971; Smith, 1991). First of all, an objectively undeserved situation is more likely to cause resentment, while envy deals more with a subjective experience of undeservingness of the situation. Second, and perhaps most importantly, for envy it is always the case that another is doing better than oneself. For resentment, such a comparison often does not exist. We can resent someone who unfairly treats another person badly, but we then do not compare ourselves to the other and feel inferior.

What do people envy?

Another interesting question is what typically elicits envy. Parrot and Smith (1993) state that this can be a superior quality, achievement, or possession. This seems to encompass practically everything, from skills to friends to products. Is it indeed the case that anything can elicit envy? The answer probably is yes, with one factor that mainly determines whether it is likely to do so: the importance of the domain of comparison. Like any emotion, the more important the situation is, the more intense the emotion will be (Frijda, 1988). Empirical research found strong support for this claim regarding envy (Bers & Rodin, 1984; Salovey & Rodin, 1984, 1991; Tesser & Smith, 1980). For example, Bers and Rodin found that younger children, who do not yet distinguish between important and non-important situations became envious in all situations in which another child was better off. Older children, in contrast, only became envious if another kid was better than they were in a domain that was important to them. With adults, Salovey and Rodin (1991) found that males tended to be envious more of wealth and females of attractiveness. These gender differences are consistent with the idea that people envy what is important to them, as from an evolutionary

viewpoint wealth is important for males to be selected for sexual reproduction while attractiveness is more important for women (Hill & Buss, 2008).

Whom do people envy?

Although in theory people can envy all others who are better than them in an important domain, research has shown that we mainly do so for people similar to us (Salovey & Rodin, 1984; Schaubroeck & Lam, 2004; Tesser, 1991; Tesser & Smith, 1980). Early philosophers already had similar ideas: Aristotle (350BC/1954) thought that we would envy those close in time, place, age, or reputation. Both Bacon (1597) and Kant (1780/1997) considered this likely to be because people only tend to compare themselves with similar others. As Bacon eloquently stated in his essay on envy: "Envy is ever joined with the comparing of a man's self: and where there is no comparison, no envy; and therefore kings are not envied but by kings." Schaubroeck and Lam indeed found that people rejected for promotion were more envious of promotees they considered to be more similar to themselves.

A likely reason for this effect of similarity on envy is the counterfactual nature of envy (Ben-Ze'ev, 1992; Elster, 1991). A counterfactual is a comparison of the current state with what it could have been. For envy this counterfactual comparison is a social one (Zeelenberg & Pieters, 2004). The more a person feels "it could have been me" after being outperformed in an important domain, the more that person will be envious. If a person is initially rather similar to a colleague (they work on the same topic, have a similar degree, have been working in academia for the same number of years), but only the colleague is promoted, it is easier to think "it could have been me" and become envious, compared to when they had not been that similar (different fields of study, she had a degree from another university etc.).

Who is envious?

As stated before, I assume (based on emotion research) that all people tend to experience (some) envy when they are outperformed by another person

in a domain that is important to them. However, some people are more prone to experiencing envy than others are. Smith et al. (1999) created a questionnaire that measures a persons tendency to experience envy (the Dispositional Envy Scale, the DES). Using this measure, they found that people who are prone to being envious tend to generally have lower self-esteem, higher levels of depression, and higher levels of neuroticism. Furthermore, a higher DES was also related to being less happy and to a lower satisfaction with life. The causality of these influences is unclear (do envious people become less happy, or do less happy people become more envious?), but the relationship does suggest that being an envious person is not a desirable trait. The research on the DES found no gender differences, males and females are on average equally envious.

A difficult aspect when studying envy is that people do not like to admit that they are envious, probably because it is so widely condemned. As Foster (1972) found, 50% of people say that they virtually never experience envy, which obviously is false (see for example the results in Chapter 2). People do recognize envy in others, however. When confronted with a typical envy eliciting situation, people said that they would not be envious in that situation, but that others would be (Habimana & Massé, 2000)[5]. If we would ask the older teachers in the opening example why they did not like the proposal to have younger teachers progress more quickly in their salary, they probably would not say that they were envious. This poses some problems in conducting research on envy, and in the final chapter of this thesis I will provide some insights gained from the research in this thesis on how to circumvent these problems when conducting envy research.

What do the envious do?

There are various ways how people can cope with the experience of envy. If envy arises when someone else has something important that a person lacks, a number of general coping options exist: one can prevent a

[5] People often see the fault in others more easily than in themselves. For example, Van de Ven, Gilovich, and Zeelenberg (2006) found that people use a less strict moral standard (is it okay for me to do this?) when questioning their own morally doubtful behavior, while they use a more strict standard for others (would it be right for them to do this?).

comparison to the other person[6], improve own performance, decrease the position of the other, or reduce the importance of the domain of comparison (Salovey & Rothman, 1991). These strategies can work on a cognitive level and a behavioral level.

On a cognitive level, the situation is merely reappraised while nothing is actually changed. As discussed before, being similar to the envied person and the importance of domain are important for envy to arise. If one therefore perceives the other to be dissimilar or downplays the importance of the achievement of the other, the experience of envy can be prevented or dampened. Other ways to cognitively cope with being outperformed are to rationalize the difference (e.g., focusing on the extra effort the envied person put into obtaining the coveted object), by overestimating one's own performance, or by derogating the performance of the other (e.g., he is not better, he was just lucky).

Most interestingly are the behavioral effects that follow from envy, as these have the largest impact on a person and the environment. If the frustration of envy arises from the gap that exists between oneself and the superior person, envy will be resolved by reducing this gap. Reducing this gap can be accomplished by either moving up oneself, or by pulling down the other. As far as I know of, empirical research has only investigated this latter, destructive behavior as a consequence of envy.

Envy indeed often contains hostile feelings (Smith, Parrott, Ozer, & Moniz, 1994), and the dispositional measure of envy (Smith et al., 1999) also includes some hostility related questions (e.g., "Frankly, the success of my neighbors makes me resent them"). People whose previous outcomes (in a social dilemma game) were lower compared to that of an opponent were less cooperative, especially those high on the dispositional tendency to experience envy (Parks, Rumble, & Posey, 2002). People who got paid less than others in an experiment were more willing to give up some of their own money, if doing so meant that the higher paid others would lose even more money (Zizzo, 2002; Zizzo & Oswald, 2001). This "money burning"

[6] However, avoiding a comparison to a person who is expected to be better off might actually backfire, as the resulting uncertainty often leads to rumination. Uncertainty is only preferred when one does not expect to ruminate about it (Shani, Zeelenberg, & Van de Ven, 2009).

shows that envy can be so strong, that people are actually willing to accept being worse of on an absolute level, as long as it would hurt the envied person more.

These are a few examples of direct destructive behavior that can result from envy. However, much of the negativity that follows from envy is somewhat more indirect, probably because people do not like to admit being envious (even to themselves). The consequences of envy are then somewhat more disguised and might therefore not be thought to be caused by envy, even when they actually are. One example is that envious like the envied less (Schaubroeck & Lam, 2004). Liking someone less can of course influence subsequent behavior towards that person negatively, but by the time it does, envy might not even be present anymore. Another example of indirect effects, is found in groups of people working together. If one person is envious of another group member, this negatively influences group performance, because the group becomes less cohesive and social loafing increases (Duffy & Shaw, 2000). Again, even if the envy is already resolved, the lower group cohesion can continue to have negative effects on performance of the group. Also, envious people gossip more about the envied (Wert & Salovey, 2004), and are more likely to experience schadenfreude when the envied person suffers a misfortune (Smith et al., 1996; Van Dijk, Ouwerkerk, Goslinga, Nieweg, & Galluci, 2006). These somewhat indirect consequences of envy might not immediately harm the envied person, but have their negative effects more in the long run. Given all these negative consequences of envy, it seems that early philosophers and religions had a point when they condemned envy.

Even though empirical research only investigated the negative side of envy, some scholars did think that both a negative and a more positive form of envy existed (Elster, 1991; Foster, 1972; Kant, 1780/1997; Neu, 1980; Parrott, 1991; Rawls, 1971). Other scholars, however, argued that only the malicious and destructive type of envy should be considered envy proper. In a recent review, Smith and Kim (2007, p. 47) even stated that distinguishing between the two types of envy "may obscure the nature of envy". I strongly disagree. In my opinion, acknowledging that different types of envy might exist, empirically testing these predicted differences, and defining them

helps to *understand* envy. Ignoring the possibility that a benign type of envy exists, actually obscures our knowledge of envy. The central tenet tested in this thesis is that envy can also have positive consequences.

Why is it important to study envy?

To answer the question why it is important to study envy, it is also important to answer the question why people envy. The research findings discussed before (that people automatically compare themselves to others, that babies cry when their mother pays attention to a life-like doll but not a book, and that capuchin monkeys experience frustration when another monkey is treated better than they are) all suggest that at its core envy appears to be a fundamental, inborn response. The sociological and anthropological research confirms envy to be a common and universal phenomenon (Foster, 1972; Schoeck, 1969). But why does this emotion exist? What is the benefit of it that makes its existence possible?

The answer probably lies in the importance of relative status or social rank. As Frank (1985) convincingly argues, having an inborn motivation to "do the best you can" is not functional (see also Tesser, 1988). People continuously choose (both consciously and unconsciously) how much time to spend on certain tasks. If I had a motivation to always do my best, this would immediately cause problems: to do the best research I can, I need to read as much as possible to keep up with the research in as much domains as possible. I also need to conduct extra studies to be able to select the best experiments and to polish my writing repeatedly. At the same time, a motivation to "do the best you can" would stimulate me to put extra time in teaching, and in cleaning my house, and in taking care of my friends, and to practice my field hockey skills, et cetera. In practice, this would be impossible (for me at least). Therefore, it seems more likely that people are motivated to "do well enough on important things".

This does, however, raise two important other questions: 1) what is well enough, and 2) what are the important things? If a person has a "concern for relative status", he or she has an answer to both these questions: well enough is when one performs equally (or better) than close others, and important are things that provide status. The social comparison

literature provides ample evidence that supports this idea, for example that being better than others generally leads to positive feelings, while being worse off leads to negative feelings (Brickman & Bulman, 1977).

How does the concern for relative status relate to envy? Emotions are evolved mechanisms that help an organism to cope with important concerns that arise in the environment (Cosmides & Tooby, 2000). For example, fear arises from a threat to physical safety, and triggers the behavior aimed at dealing with the situation. In a similar vein, envy arises when a person feels that his or her relative status is threatened. Envy is thus part of the evolved set of mechanisms that monitors whether a person succeeds in the goal of obtaining and keeping a good relative position. Having a good relative position is important for sexual reproduction, and is therefore hardwired into our genetic build (Darwin, 1859/1962; Dawkins, 1976). If envy is indeed such an evolved mechanism that monitors social rank, people should be more envious in domains with shown evolutionary benefits. This is indeed what research finds, as males tended to be more envious of wealth, while females were more envious of beauty, which are typical domains related to evolutionary fitness (Hill & Buss, 2008; Salovey & Rodin, 1991). If envy is such a common, natural experience, studying it is important to understand human behavior in numerous domains. Let me give four examples to provide some insight into the wide variety of issues for which envy could be important.

Envy in the workplace. Because a job is often a large part of one's identity, and much status can be gained from (and within) one's profession, the workplace is a likely domain for envy to arise. As discussed previously, the envious perform worse in work settings (Duffy & Shaw, 2000), do not like those whom they are envious towards (Schaubroeck & Lam, 2004), and feel less autonomy, think less of their supervisor, and have a higher propensity to quit their job (Vecchio, 2000).

Some mechanisms exist that counter envy in the workplace. Economic theories for example predict that the salary of an employee would strongly be related to their marginal productivity, but Frank (1984a, 1984b) shows that within companies the wage structure is far more egalitarian than economic theory assumes. A likely reason for this is that this helps to keep

envy at bay. This egalitarian wage structure is not something explicitly designed to dampen possible envy effects, but is likely to have evolved in a way that made all people in the organization rather content: Those who are better earn less than they potentially could according to economic theory, but in return for this they have high status within their group. Those who perform worse than their colleagues, have a low status within the group (which is aversive), but they are compensated for this by earning a higher wage than they would normally deserve (even though it is lower than that of their better colleagues). Through such egalitarian wage structures the potential negative effects of envy might be countered.

Envy in intergroup relations. The stereotype content model organizes the stereotypes people have of other groups on two dimensions, namely warmth and competence (Fiske, Cuddy, Glick, & Xu, 2002). An outgroup (a group of people of which the person itself is not part) that is perceived to be low in warmth and high in competence is called an envied outgroup in that model. Given that envy is often destructive, this does not bode well for competent but "cold" groups of people. For example, Epstein (2003) makes a compelling argument that the prosecution of the Jews in Nazi Germany was, at least partly, caused by envious feelings toward the Jews. Similarly, in many countries in South-East Asia the majority of inhabitants does not like the Chinese minority, who usually keep to themselves and do not interact much with people from outside their community. The Chinese "immigrants", who have often lived in such a country for generations, are perceived to be competent as they tend to thrive in business, but cold because they tend to keep to themselves. Especially in periods of unrest, the Chinese minority is often the victim of hostile behavior, and I would argue that envy is to blame.

Envy in consumer settings. If envy is such a negative emotion to experience, why did Gucci name one of their perfumes *envy*? Apparently, it is not that negative, at least not in the consumer domain. According to the marketing agency Young and Rubicam (2006), products that elicit envy sell better. Indeed, if relative status is important and products can increase status (Veblen, 1899/1994), the products that elicit envy will sell better. But, is it the case that products that elicit envy sell the best, because envy drives people to buy these products? Or is it merely the case that people

tend to buy status improving products more, and that these products also elicit envy more (a spurious relationship)? Chapter 5 will come back to this issue, and examines whether envy indeed increases consumption.

Envy and politics. Society has created numerous ways to deal with envy. Although politicians would not state it directly, envy (or the avoidance of it) might lie at the core of various choices made for the structure of society. For example, in ancient Athens, the citizens could anonymously vote to send a person into exile for ten years. This law allowing ostracism was originally designed to create a means to punish a very powerful person, as in the past such powerful persons had been able to prevent being prosecuted by bribing or threatening normal juries. However, as Ranulf (1933) noted, the law allowing ostracism was often used to send honest and successful men into exile, apparently for the only reason that they were successful. Envy appeared to have played a large role here.

If envy activates tendencies aimed at a pulling down the superior persons, politicians can score easy points by creating laws and institutions that help to do so. In all societies, some people are better of than others are. One goal of communism was arguably to prevent the possibility of envy, but also in democracies a desire for equality exists. For example, progressive taxation (in which the tax rate increases with the taxable amount) could be considered an envy avoidance strategy. Those who stand out more, are taxed progressively more in an attempt to distribute the money in a more egalitarian way across the citizens of a country. Although noble goals also exist why such a progressive tax might be preferred (as it also increases the overall level of well-being, see Frank, 1999), envy might also play a role here (Schoeck, 1969).

How does it feel to be envied?

If the common emotion of envy can be destructive, it seems plausible that people do not like to be envied. Research on how people feel and behave when they outperform others indeed suggests that people often feel bad after outperforming others, even though outperformance often means doing well, which should feel good. Outperformers often feel concerned about the feelings of the persons they outperformed, about how these people will

react to them, and about whether the relationship with them might suffer (Exline & Lobel, 1999). As a result, people sometimes prefer private praise to public praise (Exline, Single, Lobel, & Geyer, 2004), even though one's status can only be improved after public praise.

Although to my best knowledge no empirical research directly investigated how the fear of being envied influences behavior, history and society seem full with examples of envy avoidance behavior. People sometimes also forego direct gains, because accepting them would make other people feel bad. Schoeck (1969) describes how some universities tried to get the best professors by offering them twice the normal salary. Many of these professors who were offered such jobs declined the offer, and Schoeck argues that this was because they expected to be envied by their future colleagues. The very poor tribe of the Siriono people of Bolivia, who have a very limited supply of food, tend to eat individually and at night. If they would eat in plain sight, the other people would go stand next to them and stare at them until they had finished their meal (Schoeck, 1969). This malicious gazing resembles the old concept of "the evil eye" quite well; the idea that the malignant look of (some) people can cast a curse at others, and indeed the evil eye is often attributed to envy (Foster, 1972; Walcot, 1978).

The anthropologist Foster (1972) stated that there are four types of behavioral strategies that people use when they fear being envied. Although he did not empirically test whether people use these strategies, he did provide some examples for each strategy. Although the use of such examples does not fit the normal criteria of empirical support in psychological research, they do provide some validity to Foster's ideas. The strategies he identified are a) to hide the advantage (in Tzintzuntzan pregnant woman dress in ways to prevent other people from seeing they are pregnant), b) to deny the advantage, or to denigrate it (when the pregnancy in Tzintzuntzan can not be covered anymore, the pregnancy is talked about as an illness), c) to provide a sop, a small token as compensation for being better off (people who go on holiday often take something home to give to their friends and relatives), and d) the true sharing of the advantage (if in a group of Polynesian fishers only one would catch any fish, he would share all of his catch with the others to prevent them from becoming envious). Foster

thinks that these four strategies fall along a continuum of preferred choices, in the order presented above. That is, people will first try to hide their advantage, if this is not possible they will deny it, et cetera. Although the specific model, and the strength of the support for it, are of course open for debate, the general idea that people do not like being envied and that they will take (costly) actions to prevent it seem plausible given that envy can be very destructive. However, empirical tests are necessary to determine whether it is actually the case that people who are better off behave in ways to minimize envy in others.

If it is indeed the case that the thought that one is envied makes people for example share some of their advantage, this would point to another way in which the emotion of envy has positive consequences for society in general. Frank (1985) already noted that having a high status within a group is a positive thing for a person, but it does come at a clear cost: other people in that group must per definition have a lower status. Having a lower status is aversive, and those low in status would therefore be inclined to leave that group and go to another group in which their relative status is higher again. However, a mechanism that makes the better off in a group give something extra to the worse off, "compensates" those with low status for being low in status. I would argue that envy is such a mechanism, and that the fear of being envied is a powerful tool that promotes group cohesion.

Overview of the thesis

Figure 1.1 provides a schematic overview of the first four empirical chapters in this thesis. I start with studying the experience of envy, after which what elicits it is examined. The next two chapters investigate the (positive) behavioral consequences of envy. These steps (from appraisal to experience to behavior) are the typical timeline of the experience of an emotion; specific patterns of an appraisal lead to the experience of a specific emotion, which activates behavioral responses associated with that emotion. The final empirical chapter looks at envy from a rather different viewpoint, namely the effects of being envied. Each chapter contains between two and five studies, fifteen in total. Note that all chapters are adapted versions of

independent articles, and my aim was to make it possible for each chapter to be read on its own. This does create some overlap between chapters, however.

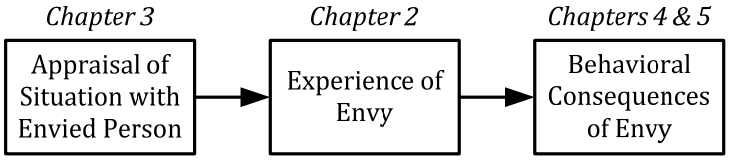

Figure 1.1 Schematic Overview of the Empirical Chapters 2 to 5 of the Thesis

Chapter 2. This chapter empirically tests whether two types of envy, one benign and the other malicious, actually exist. The approach taken is an experiential content approach, in which it is tested whether the types of envy differ on their feelings, thoughts, action tendencies, actions, and emotivational goals (Roseman et al., 1994). In these studies a guided recall task is used, in which participants are asked to recall instances of envy and rate these experiences on questions afterwards. I test whether benign and malicious envy exist in the Netherlands, the United States, and in Spain. This chapter provides insights into the experience of envy, and provides the first empirical support that envy can have positive consequences.

Chapter 3. Where the experiential content of envy is examined in Chapter 2, the appraisals that differ between the types of envy are tested in Chapter 3. What differs in the perception of the situation that determines whether someone experiences benign or malicious envy? The first study of this chapter uses a similar approach as in Chapter 2. Participants recall an instance of benign or malicious envy, and are asked to indicate how they had perceived the situation. In the second study, the appraisals that differed are manipulated independently, after which the resulting envy is measured. This chapter thus provides insight into when each type of envy is elicited.

Chapter 4. In Chapters 4 and 5 the behavioral consequences of (especially) benign envy are tested. First, Chapter 4 tests in five studies whether benign envy indeed increases performance. The effect of benign envy is compared to that of malicious envy, but also to that of admiration. In

contrast to lay theories, it is found that admiring someone does not motivate people to try to perform better, but envy does. The final study of this chapter, investigates whether envy is the primary, default response after an upward comparison.

Chapter 5. In Chapter 5 the commonly held assumption that envy influences consumer behavior is put to the test, and the effects of benign and malicious envy on consumer preferences are examined. Three studies, using two different manipulations, investigate whether people who are envious are willing to pay more for a product that elicits envy in them.

Chapter 6. In this final empirical chapter, a different perspective is used. Where the previous empirical chapters investigated positive effects of experiencing envy, I now focus on potential positive effects of being envied. In two studies people are led to think that another person is envious of them, and their subsequent behavior is measured. More specifically, it is examined whether people who think they are (maliciously) envied will behave more prosocially towards the people who might be envious of them.

After these empirical chapters, Chapter 7 contains a general conclusion and discussion. In it, the questions posed in this introduction will be reconsidered (What is envy? Why do we envy?), and it is discussed what the findings of this thesis add to answer these questions. By doing so, I will provide a summary of this thesis mainly for its implications for theory and practice. A summary of the empirical findings themselves (organized by chapter) can be found in the Summary section of this thesis, or in the Samenvatting section for a Dutch version.

Conclusion

In the current thesis, the positive effects of the negative emotion envy are investigated. The results of the studies in five empirical chapters help to identify, when, how, and why envy stimulates people to do better. Furthermore, it is tested if the fear of being envied makes people act prosocially (in an attempt to ward off the potential effects of malicious envy). To summarize all work in this thesis, I will look into the bright sides of this deadly sin.

2

Leveling up and down: The experiences of benign and malicious envy

Envy is the frustrating experience that arises from an upward social comparison. This chapter empirically supports the distinction between two qualitatively different types of envy, namely benign and malicious envy. It reveals that the experience of benign envy leads to a moving-up motivation aimed at improving one's own position, whereas the experience of malicious envy leads to a pulling-down motivation aimed at damaging the position of the superior other. Study 2.1 used guided recall of the two envy types in a culture (the Netherlands) that has separate words for benign and malicious envy. Analyses of the experiential content of these emotions found the predicted differences. Studies 2.2 and 2.3 used a sample from the U.S. and Spain respectively, where a single word exists for both envy types. A latent class analysis based on the experiential content of envy confirmed the existence of separate experiences of benign and malicious envy in both these cultures as well. I discuss the implications of distinguishing the two envy types for theories of cooperation, group performance, and Schadenfreude.

This chapter is based on: Van de Ven, N., Zeelenberg, M., & Pieters, R. (2009c). Leveling up and down: The experience of benign and malicious envy. *Emotion, 9,* 419-429.

Chapter 2.

"Envy is the great leveler: if it cannot level things up, it will level them down."
Dorothy Sayers (1949, p.771)

People around us often do better than we do; your brother may be better in tennis, your neighbor drives a newer model of your car, and a colleague receives the prestigious prize that you were after yourself. Such upward comparisons regularly lead to the emotional experience of envy. Aristotle (350BC/1954) already defined envy as the pain caused by the good fortune of others. A more recent definition is that "envy arises when a person lacks another's superior quality, achievement, or possession and either desires it or wishes that the other lacked it" (Parrott & Smith, 1993, p.906). Envy is generally frowned upon (Schoeck, 1969), and is for example one of the seven deadly sins in the Catholic tradition. Despite the apparent darkness of envy, it is "one of the most universal and deep-seated of human passions" (Russell, 1930, p. 82) and the tendency to feel envy is pervasive and seems to be present in all cultures (Foster, 1972; Schoeck, 1969).

Interestingly, Sayers' (1949) quote that opened this chapter suggests that envy might not be as homogeneous and may actually have two faces, one leveling up and the other leveling down. These two facets of envy, one being more positive and one more negative, have been speculated upon more often. On the more positive side, envy is seen as a motivational force that propels people to work harder in order to get what others already have (Foster, 1972; Frank, 1999). Envy might be one of the causes of phenomena such as keeping-up-with-the-Joneses (the strong desire to have what one's peers have), that spurs economic growth. An international advertising agency (Young and Rubicam, 2006) actively uses envy as a marketing tool in its campaigns, stating that products that evoke envy sell best. The negative side of envy is also often stressed. Envy is found to promote irrational decision-making (Beckman, Formby, Smith, & Zheng, 2002; Hoelzl & Loewenstein, 2005), to hinder cooperation (Parks et al., 2002) and to lower group performance (Duffy & Shaw, 2000; Vecchio, 2005). Schoeck (1969) proposed that the fear of being envied prevents people from striving for excellence, thereby hindering the progress of societies as a whole. The leveling up and leveling down parts of envy are also present in Parrot and

Smith's (1993) previously mentioned definition that an envious person either desires the superior quality, achievement or possession, or wishes that the other lacked it.

Envy stems from an upward social comparison and can be reduced by narrowing the gap between oneself and the other. This can be achieved by moving oneself up to the level of the other, and by pulling the other down to one's own position. I propose here that these two distinct envy experiences, one benign and the other malicious, elicit these different behavioral expressions. As explained hereafter, it appears that it is not just the case that in some situations envy will lead to moving-up and in other situations to pulling-down, but rather that the emotional experiences of benign and malicious envy differ, from activated thoughts to the elicited actions.

The proposal of two different envy types has a longer history (e.g., Elster, 1991; Foster, 1972; Kant, 1780/1997; Neu, 1980; Parrott, 1991; Rawls, 1971; Smith, 1991; see for a review Smith & Kim, 2007). However, these ideas about two envy types have not been empirically tested, and they differ in relevant aspects. Some theorists state that the distinction between types of envy is based upon the presence or absence of hostility, and that only envy with a component of hostility is envy proper (Rawls, 1971; Smith & Kim, 2007). According to them, envy without hostility resembles admiration and is therefore not a form of envy proper. Yet sometimes benign envy is considered to be envy as well (Foster, 1972; Neu, 1980), as despite this lack of hostility, benign envy still contains the pain or frustration caused by another's superiority.

The issue therefore remains whether or not there are distinct types of envy and what their experiential contents and behavioral implications are. The research in this chapter aims to clarify this issue and advance emotion theory by studying the experiential content of benign and malicious envy. In the first study, these types of envy are investigated in the context of two related but different emotions: admiration and resentment. Comparing benign and malicious envy to admiration and resentment is important because theory suggests that benign envy shares some resemblance with admiration, and malicious envy with resentment (e.g., Smith & Kim, 2007). Benign and malicious envy are expected to differ from these related

emotions, as envy typically arises after a frustrating upward comparison and this comparison is not necessary for neither admiration nor resentment.

When studying the potential two-facedness of the emotion of envy, it is interesting to note that whereas some languages have a single word, others have multiple words to refer to envy. Languages of the former kind are, among others, English (*envy*), Spanish (*envidia*), and Italian (*invidia*). Languages of the latter kind are, among others, Dutch (*benijden* and *afgunst)*, Polish (*zazdrość* and *zawiść*) and Thai (phonetically, *èt-chăa* and *rít-yaa*). The fact that some cultures have different words to indicate envy already indicates there might be different types (Breugelmans & Poortinga, 2006). Languages that have multiple words for envy typically distinguish between a benign and a malicious form[1]. Although in English the default form of envy seems to be malicious envy, people often use it in a more positive way as well. People sometimes say "I envy you" to express that they are impressed and would like to also have what the other has. Based on these observations, it is investigated whether the postulated two different emotional experiences of envy actually exist in languages and cultures with one as well as with two words for envy. To this end, a new methodology is proposed based on the experiential content of the emotions combined with latent class analysis.

Analytical approach

To determine how envy can result in the very different actions of moving up or pulling down, I build on the idea that emotions have a pragmatic function by preparing and motivating a person for certain actions, by means of the specific feelings that become activated (Arnold, 1969; Frijda, 1986; Zeelenberg & Pieters, 2006). To this aim, the experiential content of envy is analyzed, using a componential approach (Frijda et al., 1989; Roseman et al., 1994). Figure 2.1 provides an overview of the steps that were taken to analyze the two envy types.

[1] Translations of envy were derived from informal communications with students and faculty from the various countries and checked via web dictionaries.

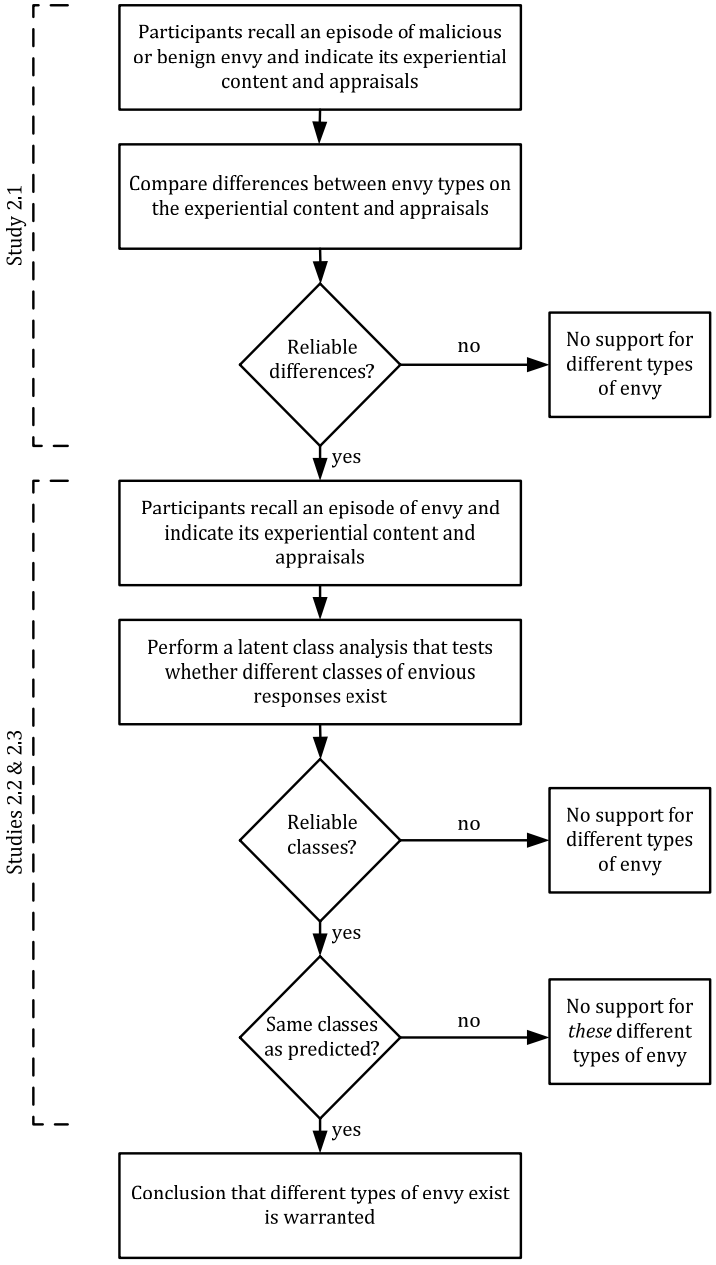

Figure 2.1 Analytical Framework: Identifying different types of envy

First, it was tested whether differences between the two envy types existed in a culture that uses separate words, and in a second step it was determined whether the same differences could be found in cultures with a single word for envy. The first study was conducted in the Netherlands, which has different words for the two envy types: *benijden* (benign envy) and *afgunst* (malicious envy). Etymologically, *benijden* stems from the medieval word *beniden* which means being unable to bear something, and *afgunst* stems from *niet gunnen* which means to begrudge (Dutch Etymologic Online Dictionary, 2007)[2]. The different origins of these Dutch words are consistent with the idea that the envy types indeed are likely to have different meanings. I first conducted a pilot study (N = 48) to determine whether these different Dutch words for envy were actually perceived to be different.

Participants read the following story:

> Niels and Rik play in the first team of a good soccer club. Marcel, a teammate of Niels and Rik, is selected to play for a professional team. Niels feels benign envy towards Marcel [*benijdt Marcel*], Rik feels malicious envy [*Rik is afgunstig*].

Next, participants indicated whether they thought Niels or Rik would be more likely to feel or perform in a given way. The results in Table 2.1 reveal that *afgunst* is associated with the pulling-down motivation while *benijden* is associated with the moving-up motivation.

This supports that the two Dutch words indeed reflect different forms of envy, and that it is useful to pursue further testing. In Study 2.1 Dutch participants described a personal experience of *benijden* (benign envy) or *afgunst* (malicious envy), after which they responded to questions about the experiential content of their experience. The experiences of benign and malicious envy were expected to differ from each other, and from the related emotions of admiration and resentment.

[2] Checking the translation website lookwayup.com, both *benijden* and *afgunst* translate into envy. Translating envy back to Dutch gives a few more possible translations, of which *benijden* and *afgunst* are by far the most common ones.

Table 2.1 Number of participants indicating whether a person experiencing benign or malicious envy would be more likely to react in a given way

Who would be more likely to ...	*Niels: Benign Envy*	*Rik: Malicious Envy*	*p* <
Malicious envy items			
commit a mean foul against Marcel if they would play against each other?	7	41	.001
hope that Marcel will not make it as a pro-player?	9	39	.001
Benign envy items			
be more motivated to become a pro-player himself?	38	10	.001
start training more?	42	6	.001

Note. N = 48. The performed statistical test is a binomial test.

The next step was to use these key experiential content components to investigate whether the two envy types are also present in cultures with a single word for envy. In Study 2.2 U.S. participants recalled an envy experience and answered questions regarding this experience. A latent class analysis was used, which detects different patterns of responses from a common set of data (McCutcheon, 1987; Vermunt & Magidson, 2003). If the same distinct pattern as in Study 2.1 were to be found, that would constitute strong support for the existence of the two envy types, even in a language using a single word to describe both. Finally, Study 2.3 is a replication of Study 2.2 in Spain, where also one word exists for both types of envy.

Study 2.1

Participants recalled an experience of benign envy, malicious envy, admiration, or resentment. Admiration and resentment are included to establish the discriminant validity with respect to related but different emotions. After describing these situations, the participants answered questions regarding the experiential content, using the procedure of Roseman et al. (1994). Participants' descriptions were content analyzed on the presence of the four necessary preconditions that are thought to exist for envy (Smith, 2004). Smith proposed that being similar to the other, seeing the situation as self-relevant, perceiving to have low control over

gaining the desired attribute, and feeling that the other did not deserve the advantage, are all necessary preconditions for envy to arise. In addition, it was coded whether the participants mentioned an explicit comparison in their description of the emotional episode. An explicit social comparison was expected to be characteristic of both types of envy, but not of resentment and admiration.

For the experiential content measures, malicious envy was predicted to feel more frustrating, thoughts to be more about injustice perceptions, and the resulting action (tendencies) to be aimed at derogating and hurting the other, for example by gossiping about the envied person. For benign envy, it was predicted that people would like the other person more and would like to remain close to this other person, even though the emotion itself is a negative experience. Action tendencies and actions were predicted to be aimed at improving one's own situation.

Method

Students at Tilburg University participated voluntarily (92 females and 68 males, M_{age} = 21 years). The study had a four-group design (benign envy versus malicious envy versus admiration versus resentment) with 40 participants per condition.

Participants were asked to recall and describe a situation in which they had a strong experience of benign envy (*benijden* in Dutch), malicious envy (*afgunst*), admiration (*bewondering*), or resentment (*rancune*). Next, participants rated on 9-point scales how intense the experience had been (not at all – very), how long ago it had happened (a very long time ago – only a short while ago) and how easy it was to recall the experience (very difficult – very easy). Differences in the intensity of the emotion could obscure any differences between the emotions (see for example Parrott & Smith, 1993), and if any differences in intensity would exist, it should be included as a covariate to make valid inferences.

Next, participants answered questions regarding the experienced feelings, thoughts, action tendencies, actions, and emotivational goals (Roseman et al., 1994). For each of these content types, four separate items were created based on my predictions, the first two hypothesized to be

characteristic of malicious envy, the other two of benign envy (the questions are presented with the data in Table 2.3).

Results

Reported events. A MANOVA with the recalled emotions as the between-subjects variable revealed no significant differences in the intensity of the emotions recalled, how long ago it was that they had occurred, and the ease with which they could be recalled, $F(3, 375) = 1.63$, $p = .11$, $\eta_p^2 = .03$, which is desirable. Therefore, any differences between conditions cannot be explained by differences in the intensity of the recalled experiences. All reported events and emotions were fairly intense ($M = 7.34$, SD = 1.08), recent ($M = 5.38$, SD = 2.34) and easy to imagine ($M = 6.40$, SD = 2.27, all measured on 9-point scales with higher scores indicating the situation to be more intense, more recent and more easy to imagine).

For the content analysis, two independent judges indicated whether the participant 1) made an explicit comparison with another person, 2) indicated to be similar to the other, 3) indicated that the domain was relevant for his or her self-view, 4) indicated to have little control over the situation, and 5) thought something was unfair or undeserved. Average agreement between the raters was 86% and remaining differences were resolved by discussion. The results of this content analysis (see Table 2.2) partly support Smith's (2004) idea about envy's necessary preconditions. The main finding is that similarity, domain relevance, low perceived control, and perceived unfairness are all characteristic of malicious envy, but only the first two are strong characteristics of benign envy. The content analysis also revealed that an important aspect of envy is whether people made an explicit comparison between oneself and another person. Such comparisons were made in virtually all stories of benign and malicious envy, whereas hardly any direct comparisons were made in the admiration and resentment stories. For example, one of the benign envy stories stated "*My friend graduated with a 9 (out of 10). I felt benign envy as my own graduation was a tough and difficult experience, and I will probably barely pass it with a 6.*", a typical admiration story stated "*I admired a 14-year old swimmer who competed in the last Olympics.*"

Table 2.2 Content analysis of recalled emotional episodes in Study 2.1

	%			
Present in Story?	Benign Envy	Malicious Envy	Admi-ration	Resent-ment
Explicit Comparison	70.0[b]	62.5[b]	12.5[a]	2.5[a]
Similar to Other	92.5[bc]	97.5[c]	67.5[a]	77.5[ab]
Self-relevance of Domain	90.0[b]	97.5[b]	22.5[a]	97.5[b]
Low Perceived Control	52.5[b]	82.5[c]	0.0[a]	77.5[c]
Perceived Unfairness	30.0[b]	77.5[c]	0.0[a]	97.5[d]

Note. Percentages indicate the number of stories in which the statement was deemed present. On all questions significant differences existed between conditions, $\chi^2(3, N = 160) \geq 16.72$, $p < .001$. Different superscripts indicate significant differences between the emotion conditions, with $p < .05$.

Experiential content. All results are presented in Table 2.3. A MANOVA with emotion condition as the between-subjects variable and the experiential content questions as the dependent variables was performed. As expected, there was a strong general effect of recalled emotion on the experiential content, $F(60, 410) = 8.16$, $p < .001$, $\eta_p^2 = .54$. Contrast analyses between benign and malicious envy indicated that 18 out of the 20 questions differed significantly, all in the predicted direction. These main findings will be discussed further in the general discussion.

Discussion

These findings provide consistent support for distinguishing the experience of the two types of envy, a benign and a malicious form, and that these envy types also differ from closely related other emotions. The effects on the actions taken and the emotivational goals are especially pronounced, and these support the apparent paradox between the views of envy as a sin aimed at degrading the superior other and an envy that is a motivational force that drives aspiration levels. While the moving-up motivation of benign envy leads to positive improvement for oneself, malicious envy can be harmful to others as the motivations are aimed at pulling-down the other from the superior position.

Table 2.3. Experiential content of benign envy, malicious envy, admiration and resentment in Study 2.1

Experiential Content	Benign envy A	Malicious envy B	Admiration C	Resentment D	Overall difference	Contrast significance		
	M (SD)	M (SD)	M (SD)	M (SD)	*F*(3, 156)	AB	AC	BD
Feelings								
Felt frustrated	6.53 (2.15)	7.83 (1.22)	1.70 (1.24)	7.78 (1.41)	139.95***	***	***	
Felt shame for my thoughts	4.35 (2.65)	3.97 (2.77)	1.75 (1.33)	3.22 (2.28)	9.76***		***	
Felt admiration for the other person	6.25 (2.65)	3.57 (2.83)	7.35 (2.39)	1.67 (1.07)	48.37***	***	*	***
Felt pleasant	3.50 (2.03)	2.30 (1.40)	6.78 (1.99)	1.97 (1.52)	69.03***	**	***	
Thoughts								
Thought of injustice being done to me	3.82 (2.98)	6.30 (2.33)	1.87 (1.52)	7.45 (2.12)	47.34***	***	***	*
Thought negatively about myself	4.50 (2.73)	3.92 (2.69)	2.05 (1.62)	3.70 (2.60)	7.34***		***	
Thought positively about other	5.70 (2.57)	3.15 (2.75)	8.52 (0.75)	1.77 (1.37)	84.00***	***	***	**
Thought of improving my situation	6.25 (2.56)	5.13 (2.49)	5.65 (2.38)	5.38 (2.50)	1.52	*		
Action tendencies								
Wanted to take something from other	2.95 (2.51)	4.10 (2.73)	2.42 (2.21)	5.55 (2.42)	12.54***	*		**
Wanted to degrade other	2.90 (2.24)	4.47 (2.84)	1.70 (1.34)	6.55 (2.28)	35.10***	**	*	***
Wanted to improve own position	6.55 (2.65)	5.00 (2.62)	5.08 (2.90)	4.97 (2.76)	2.34*	*	*	
Wanted to be near other	6.43 (2.17)	3.05 (2.72)	7.10 (1.87)	2.12 (1.80)	51.28***	***		
Actions								
Tried to hurt the others' position	2.17 (2.09)	3.45 (2.56)	1.57 (1.30)	5.25 (2.43)	22.87***	**		***
Talked negatively about other	3.50 (2.76)	6.43 (2.56)	2.07 (1.83)	7.58 (1.69)	50.86***	***	**	**
Complimented the other sincerely	5.73 (2.61)	3.47 (2.78)	7.45 (2.38)	1.70 (1.16)	47.19***	***	***	***
Reacted actively	6.15 (1.97)	4.47 (2.47)	6.63 (1.93)	5.93 (2.19)	7.42***	***		**
Emotivational Goals								
Hoped the other would fail in something	3.85 (2.82)	6.00 (2.60)	1.77 (1.44)	7.15 (2.14)	42.27***	***	***	*
Hoped for justice to be done	5.95 (2.35)	7.40 (1.72)	4.25 (3.05)	7.93 (1.31)	22.31***	**	***	
Hoped the other would do well	6.38 (2.34)	4.50 (2.72)	8.43 (0.93)	2.85 (2.02)	51.95***	***	***	***
Hoped to remain/become friends with other	6.63 (2.22)	4.15 (2.96)	7.48 (1.65)	2.87 (2.38)	33.15***	***		*

Note: Means and standard deviations of items regarding the experiential content (n = 40 per condition). All answers on a 9-point scale, ranging from 0 (not at all) to 8 (very much so). The contrasts compare benign to malicious envy (AB), benign envy to admiration (AC) and malicious envy to resentment (BD). *p < .05, **p < .01, ***p < .001

Unexpectedly, malicious envy did not elicit more feelings of shame, nor did people think more negatively about themselves than those in the benign envy condition. A reason for this might be that people who experience malicious envy do not feel that ashamed, because they feel that their negative attitude toward the other is (somewhat) justified. People who feel benign envy might still feel somewhat ashamed of their thoughts, not because they feel negative toward the envied person, but because they realize that they are in an inferior position. This remains speculative and further research might clarify when and why experiencing envy elicits feelings of inferiority or shame, and when it does not.

The two types of envy also systematically differed from the related emotions of resentment and admiration, which is important. Malicious envy resembles resentment in some ways. Some (Parrott, 1991; Smith et al., 1994) already reasoned that malicious envy and resentment are much alike, but that they differ in the justifiability of the emotion. Indeed, the negative feelings and consequences are more pronounced for resentment, likely because the emotional experience is attributed more to deliberate behavior of the other person. A more important difference seems to be that malicious envy arises after an explicit comparison between oneself and the other, while resentment does not contain such a comparison.

Benign envy resembles admiration, although benign envy feels unpleasant and frustrating while admiration is a pleasant emotion to experience. Furthermore, with benign envy there is more negativity towards the other, and it is more motivating than admiration. A reason for these differences might be that when one admires a person an explicit comparison is not necessarily made, while this is the case for benign envy. The resulting frustration from this upward comparison feels negative, but does motivate to attain more for oneself.

Study 2.2

Now that the typical experiential differences between the two types of envy are established, I wanted to make sure that the distinction is not just based upon concepts that only exist in the Dutch language. Therefore, a study was conducted to test the hypothesis in the U.S., where the single label of envy

refers to both types. It was expected that if people were asked to describe an experience of envy, some would describe benign envy and others would describe malicious envy. To explore this, a latent class analysis was used (LCA; McCutcheon, 1987). LCA attempts to create subgroups with different response patterns that arise from a common condition, in this case the usage of the emotion word envy. LCA is similar to cluster analysis, but instead has statistical criteria to determine the optimal number of classes (notably the Bayesian Information Criterion, BIC). Another advantage of LCA is that it uses model-based probabilities to classify cases, whereas cluster analysis groups cases only via the distance between the cases, without firm statistical criteria (for a recent application of LCA in psychology, see Quaiser-Pohl, Geiser, & Lehmann, 2006). Thus, in order to support the idea that two types of envy exist, the LCA should find two firm classes of which the response patterns closely resemble those of benign and malicious envy that were found in Study 2.1. The lower part of Figure 2.1 summarizes these steps of the current analytic approach.

Method

Seventy undergraduate students of Cornell University in the U.S. (37 females, M_{age} = 20 years) participated in this study that had a one-group design. They were asked to write one or two sentences about a situation in which they experienced envy. Next, they answered questions selected to differentiate between benign and malicious envy, based on the findings of Study 2.1. There were six items related to the experiential content (three for both types of envy), and one for the item in the content analysis that distinguished the types of envy best, namely a feeling of unfairness (see Table 2.4).

Results and discussion

All items were entered as indicators in the LCA. I ran the LCA for 1 to 4 subgroups (classes), using LatentGOLD 4.0 (Vermunt & Magidson, 2005). Of the four analyses, the solution with the lowest BIC value was chosen (see Raftery, 1996, for model selection based on BIC values). As hypothesized, the solution with two classes had the lowest BIC value (the values were

1264, 1214, 1216, and 1222 for a 1 to 4 subgroup solution respectively). The estimated percentage of classification errors for this solution was only 4%, which indicated that the two classes are well separated (see Vermunt & Magidson). Table 2.4 presents the effects of the classes on the indicators and the average scores on the questions for each class. As becomes clear from the table, the differences in means of the two classes fit the distinction between benign and malicious envy remarkably well. Malicious envy felt much more frustrating, the experience led to a motivation to hurt the other, and one hoped that the other would fail in something. For benign envy, the other was liked more, the situation was more inspiring, and one tried harder to attain more for oneself (the latter being marginally significant).

Table 2.4 Results of latent class analysis on the experiential content of envy in the U.S. in Study 2.2

	Benign Envy	Malicious Envy	Effect of Cluster on Indicator		
Question	Class 1	Class 2	Wald	$p \leq$	r^2
I liked the other	6.42 (1.57)	4.78 (2.09)	-0.24	.001	.15
I felt inspired by the other	4.45 (2.53)	2.44 (2.09)	-0.20	.001	.20
I tried harder to achieve my goals	5.26 (2.04)	4.44 (2.23)	-0.13	.055	.06
The experience felt frustrating	3.50 (2.00)	6.50 (1.24)	0.59	.001	.51
I wanted to hurt the other	0.24 (0.49)	2.88 (2.24)	0.53	.001	.27
I hoped that the other would fail something	0.82 (1.45)	4.84 (2.00)	0.39	.001	.41
I considered the situation to be unfair	2.76 (2.53)	4.25 (2.50)	0.25	.004	.27
n =	38	32			

Note. The Wald statistics indicate the size of the effect of the clusters on the indicators. Means are the average responses of the cases in each class., SD within brackets. Responses were provided on 9-point scales, ranging from 0 (not at all) to 8 (very much so). Because the predictions specify the direction of the differences between the classes, one-sided *p*-values are reported.

The results of Study 2.2 show that even though the English language has only a single word for envy, the two types of envy can be distinguished reliably. Although the LCA could potentially indicate any number of classes between one and four, the distinction in two classes was best, which is reassuring. Combined with the close resemblance to the results of Study 2.1, the findings of Study 2.2 support the hypothesis that two different kinds of envy exist. Interestingly, when asked to report on envy, about half of the participants described an emotional experience of benign envy, the other half one of malicious envy.

Study 2.3

Study 2.3 was conducted to address three potential limitations of the earlier studies. First, Study 2.3 measured the experiential content of envy at the same day the emotion was experienced. In the previous studies in this chapter, participants recalled an episode in their life in which they had experienced envy. This could have influenced the results as participants might have only been able to recall experiences of extreme envy, or it might have "forced" people who hardly ever experience envy to come up with an instance of it. To prevent this, the participants in Study 2.3 answered a short question every evening, namely whether they had experienced envy that day. If they indicated that they had, they subsequently answered questions regarding the experiential content of that envious experience. Earlier research has shown that such end-of-the-day recall methods may be more precise than other methods of measuring emotional events over a longer period of time (Ptacek, Smith, Espe, & Raffety, 1994), and yield practically similar results as direct experience sampling at the moment itself would (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004).

Second, because some of the questions used in Study 2.2 could also be interpreted as appraisals of the situation instead of the experiential content of the emotion, different questions were used in Study 2.3. The questions now explicitly stated "When I experienced envy...", to focus the attention to the experience itself, not the situation that had elicited the emotion. Using this statement follows suggestions by Roseman et al. (1994), who explained the importance of asking for the experience to measure the experiential

content of an emotion. This way, I explicitly tapped into the experience of the types of envy and not the appraisals of the situation that led to them, as could have potentially been the case in Study 2.2.

Finally, Study 2.3 was conducted in Spain, another country with only a single word for envy (*envidia*). Finding support for the two types of envy in yet another culture would strengthen the case for a distinction between benign and malicious envy, at least in three distinct western cultures.

Method

Participants indicated on a daily basis whether they had experienced envy that day for a period of 2 weeks. Of the 49 participants, 10 indicated that they had not experienced envy during the period of study and were therefore dropped from the analysis. The remaining sample consisted of 25 females, 10 males, and 4 of which the gender was unknown (M_{age} = 25 years). Twenty-six lived in Bilbao (in the north of Spain) and 13 in Valencia (in the east of Spain)[3]. The study again had a one-group design.

Participants received a questionnaire on which they indicated every evening whether they had experienced envy that day. If they had, they were instructed to open a sealed envelope that contained another questionnaire on envy. On this questionnaire, the participants first briefly described their experience of envy, after which they answered a number of questions regarding the experiential content. All questions were introduced with the term "When I experienced envy...", to make it explicit that the questions were about the experience of envy itself, not about the eliciting conditions. The questions can be found in Table 2.5. Questions were scored on a 3-point scale, with -1 (no), 0 (somewhat) and 1 (yes).

Results

On average, the participants who had experienced envy did so after 5.21 days (SD = 3.40)[4]. The median response of all participants, including those that indicated that they had not experienced envy was also 5 days.

[3] There was no difference between the regions on the experiential content questions, $F(7, 31) = 1.08$, $p = .402$, nor on the distribution of the types of envy, $\chi^2(N = 39) = 1.95$, $p = .163$.
[4] There was no difference in the number of days it took for a person to experience benign envy (5.20 days, SD = 3.28) or malicious envy (5.21 days, SD = 3.55), $F(1, 37) < .01$, $p = .994$.

A LCA on the experiential content of the Spanish experiences of *envidia* confirmed the findings of Studies 2.1 and 2.2 that two types of envy exist. Similar to the findings in Study 2.2, the solution with two clusters of responses was the best, having the lowest BIC (211, 163, 164, and 185 for a one, two, three, and four class solution respectively). The estimated number of classification errors was again very low (2%). As the results in Table 2.5 reveal, the pattern of responses neatly maps unto the two types of envy found before, thereby replicating the results of the previous studies. Those who were maliciously envious felt cold towards the envied person and frustrated, hoped the envied person would fail in something, and complained to someone else about this person more than those experiencing benign envy. Participants who experienced benign envy felt less unpleasant, more inspired, indicated to have tried harder to attain something similar for themselves, and complimented the envied person more than those who experienced malicious envy. Of the participants, 15 out of 39 (38%) reported on an instance of benign envy, the others on malicious envy.

Discussion

When asked to recall a situation of *envidia*, the Spanish word for envy, these recalled episodes could again be classified as either benign or malicious envy. Furthermore, participants recalled and rated these experiences on the day that they had experienced the emotions. This overcomes a potential limitation that recalling situations from a relatively longer time ago might have, and thereby strengthens the case for the two types of envy.

Table 2.5 Results of latent class analysis on the experiential content of envy in Spain in Study 2.3

When I experienced envy...	Benign Envy Class 1	Malicious Envy Class 2	Effect of Cluster on Indicator Wald	$p \leq$	r^2
it felt pleasant	-0.20 (0.41)	-1.00 (0.00)	4.47	.017	.61
I felt inspired by the person whom I envied	0.20 (0.68)	-0.88 (0.34)	8.07	.003	.48
I tried harder to achieve my goals	0.54 (0.52)	-0.23 (0.71)	4.42	.018	.36
I complimented the other for his or her success	0.67 (0.62)	-0.54 (0.72)	8.96	.002	.46
I felt cold toward the person whom I envied	-0.80 (0.41)	-0.04 (0.91)	5.71	.009	.21
it felt frustrating	-0.20 (0.68)	0.33 (0.82)	5.56	.039	.10
I hoped that the envied person would fail something	-1.00 (0.00)	-0.46 (0.72)	2.38	.060	.19
I complained to someone else about the envied person	-0.87 (0.35)	-0.08 (0.93)	3.11	.009	.21
n =	15	24			

Note. The Wald statistics indicate the size of the effect of the clusters on the indicators. Means are the average responses of the cases in each class., SD within brackets. Responses were scored on 3-point scales, with -1 (no / not much), 0 (somewhat), and +1 (yes / a lot). Because the predictions specify the direction of the differences between the classes, one-sided *p*-values are reported.

General discussion

Three studies provide empirical evidence for two qualitatively different types of envy that differ in their experiential content. Study 2.1 found that people in the Netherlands describe different types of envy if they report on *benijden* (benign envy) or *afgunst* (malicious envy). Study 2.2 and 2.3 replicated these findings in the U.S. and Spain respectively, where a single word denotes the emotion of envy. A latent class analysis found that people in these countries actually still describe two distinct envy types that are fully consistent with the distinction found in Study 2.1. Both types of envy are aimed at leveling the difference between oneself and the superior other. Yet, the experience of malicious envy leads to action tendencies aimed at pulling-down the superior other; whereas the tendencies of benign envy are

aimed at moving-up to the superior position oneself. Let me first describe the experiences of benign and malicious envy, before continuing to the implications of these findings.

What envy is

Current findings. Benign envy is the more uplifting type of envy: people like and admire the comparison other more, want to be closer to this other person, and give more compliments than those experiencing malicious envy. On top of this, they want to improve their own position by moving-up. It is striking that they still feel a high level of frustration and inferiority, but the other aspects of the experience and the consequences are rather positive. I expect that exactly this frustration is what triggers the positive motivation that results from benign envy, as the frustration signals to the person that the coveted object is worth striving for (see also Johnson & Stapel, 2007a, for a similar finding in research on social comparisons). Although benign envy did not receive much attention in the literature so far, the finding that about half the participants in the U.S. and one in three participants in Spain spontaneously thought of an experience of benign envy when prompted for envy, indicates that it is an important facet of envy. Note that the exact percentage should be interpreted with care of course, as it is also the more social desirable answer.

Benign envy seems to be a big motivator for people, inspiring them to attain more for themselves. As such, this emotion could be the driving force of phenomena such as keeping-up-with-the-Joneses, the idea that people want to keep up with what their peers have. Although a continuous need to want more certainly has its drawbacks (Frank, 1999), further research into an emotion that might spur economic growth seems important.

Malicious envy is clearly a negative experience. People experiencing this emotion feel frustrated, think that injustice is being done to them, are more willing to degrade, take something from and gossip about the comparison other, are more likely to actually try to hurt the other, and hope that the other would fail something. Although the pulling-down motivation that results from malicious envy can explain why envy is often seen as a sin, people do not seem to experience it that way for themselves. People only

feel moderately ashamed for their thoughts and they even consider their feelings to be morally justified. This discrepancy is what makes malicious envy such an interesting topic for further research; an emotion condemned by others, justified by oneself, which results in behavior aimed at hurting another person can have serious consequences for oneself and for others.

Given the obtained differences on all aspects of the experiential content, I am confident to conclude that it is not the case that envy merely leads to different behavior in different situations, but that the entire experience of malicious and benign envy is different; from the elicited thoughts and feelings to the action tendencies. Based on Parrot and Smith's (1993) definition of envy, I believe that the research presented in this chapter allows the proposition of more specific definitions for the different types of envy: benign and malicious envy are both unpleasant and frustrating experiences, that arise from a realization that one lacks another's superior quality, achievement or possession, but benign envy results in a motivation to gain the coveted object for oneself as well, whereas malicious envy results in a wish for the other to lose it.

So far, three western cultures were studied and the question remains whether the two types of envy also exist in non-western cultures. Some hints exist that suggest that this is likely to be the case, as more cultures use two words for a more positive and a more negative envy as well (e.g., Polish and Thai). Still other languages might not have a single noun for benign envy, but do use combinations of words to express it. For example in Russia, an experience very similar to benign envy is called "white envy".

An interesting question is whether the two types of envy are mutually exclusive experiences, or whether these experiences can overlap. The latent class analysis suggests that two separate, mutually exclusive classes exist. However, the latent class analysis forces cases into a cluster, which might obscure the idea that they can co-occur. If I take a closer look at the ratings, it appears that a combined score of the questions for benign envy and those of malicious envy are correlated negatively; $r(70) = -.36$, $p = .003$ in Study 2.2 and $r(39) = -.49$, $p = .001$ in Study 2.3. This suggests that, in general, the more one experiences one type of envy, the less one experiences the other type. Furthermore, a median split on both these combined measures shows

that across the experiments, only 13% is classified as scoring high on both types (the far majority of cases scores high on one type of envy and low on the other). This suggests that it is possible to experience both types of envy at the same time, but that it does not occur often.

Given the reluctance of people to admit that they are envious, the findings of this chapter also provides some guidance to measure envy in future research. Especially the questions used in Study 2.3 are good for measuring differences between malicious and benign envy in a relatively indirect way by asking for the experiential content instead of the socially undesirable concept of envy. Furthermore, asking whether someone actually compares him- or herself to another person is good for contrasting both types of envy with other emotions, such as admiration and resentment.

Fit with previous findings. Besides contrasting malicious and benign envy, it was also tested how they differ from the related emotions admiration and resentment. Smith (2000) described how emotions that can result from social comparisons differ on three factors (upward versus downward comparison; self versus other versus dual focus; high versus low perceived control). In that conceptualization, admiration and resentment are both emotions that arise from an upward comparison, with a focus on the other person. Resentment is placed on the "contrastive" comparison side, with envy next to it. The difference with envy, hypothesized Smith, is that envy arises from a dual focus (on oneself and the other person), while resentment mainly arises from a focus on the other person. Admiration is placed on the "assimilative" comparison side, with inspiration next to it. They differ in the same way that resentment differs from envy; inspiration has a dual focus and admiration focuses on the other person. The findings of this chapter suggest that having a dual focus is a defining feature of both types of envy. What Smith labeled as envy appears to actually be malicious envy. Next to inspiration I would like to position benign envy as an assimilative upward comparison with a dual focus. Whereas inspiration is an overall positive feeling, benign envy still feels negative and frustrating, but does lead to a desire for improvement as well (see also Chapter 4 for more on this distinction).

The analysis of the content of the personal emotional episodes gives some support for Smith's (2004) idea concerning the necessary preconditions for envy to arise. Both types of envy are more likely after one compares to the other person, as is the case when one is more similar and the domain is relevant (Tesser & Smith, 1980). However, Smith's idea that it is characteristic of envy to perceive the situation as unfair and to feel low control, is actually only characteristic of malicious envy. This indicates that envy can result without feelings of unfairness and perceived low control, but the resulting envy will be benign envy and not malicious envy.

Based on Smith's (2004) ideas, I found that the eliciting patterns of benign and malicious envy mainly differ on whether a person feels that injustice is being done. Previous studies (Feather, 1994; Smith et al., 1994) found an effect of feelings of undeservedness and subjective injustice on the hostility in envy. Something similar is found in this chapter, where malicious envy (which leads to hostility) is more likely to be elicited in undeserved situations, while benign envy is more likely to be elicited in situations that are deserved.

Besides investigating this subjective injustice-hostility link in envy, Smith et al. (1994) also found that feelings of inferiority were related to depressive feelings. Their research investigated whether these feelings were related within an experience of envy, but not whether these experiences were different types of envy. A person can think the situation is undeserved and therefore become hostile, but at the same time feel inferior and subsequently depressed. I do not contest that a link between feelings of inferiority and depression exists in envy, but the current data suggests that this is not a separate type of envy. If this would have been the case, an envy type that had *less* motivational tendencies for self-improvement should have been found in the latent class analyses. Feelings of inferiority were present in both malicious and benign envy (see Study 2.1), and some depressive feelings are thus likely to exist in both types of envy.

Elster (1991) linked envy to counterfactuals, stating that anything that increases the chances of thinking "it could have been me", increases envy. Based on the differences in the perceived undeservedness characteristic of malicious envy, malicious envy seems characterized by

thoughts like "it *should* have been me," while benign envy seems characterized more by thoughts like "it *could* have been me." Earlier research has already found that small differences in counterfactual thought can evoke qualitatively different emotions. Counterfactual thoughts like "if only I weren't" evoke shame, while thoughts like "if only I hadn't" evoke guilt (Niedenthal, Tangney, & Gavanski, 1994). Because envy is inherently a comparison-based emotion (one compares one's own situation to that of another), it is potentially fruitful to link the theories on counterfactuals to those of envy.

What envy does

The effect of envy on behavior has been explored in various domains, and in some of those the current distinction between types of envy can help to clarify or extend earlier findings. For example, a study by Parks et al. (2002) found that people experiencing envy became less cooperative in a social dilemma game. However, it remains unclear in their study which motivation caused this drop in cooperative behavior: did people want to pull-down the superior other by not cooperating, or did they want to move-up by being selfish? In the paradigm used by Parks et al. both these motivations lead to the selfish behavior found in their study, but in other settings the separation of these motives might lead to different behavior. Similarly, a longitudinal study on the effects of envy on group performance (Duffy & Shaw, 2000) found a negative effect of envy on group performance, group cohesion, and social loafing. The envy measure consisted of questions measuring malicious envy (e.g., feelings of frustration, unfairness, and perceived injustice), and was thus not surprisingly related to these negative effects. The effects of benign envy on group performance are harder to predict. Although it motivates people to try to improve their own position, it can result in positive behavior for the group (extra effort) or in behavior that is potentially harmful (selfishness).

There is a debate on the possible role of envy as a cause of Schadenfreude (the pleasure at the misfortune of others). Some research finds that envy promotes Schadenfreude (Smith et al., 1996; Van Dijk, Ouwerkerk, Goslinga, & Nieweg, 2005), while other research suggests that

other negative feelings such as disliking the other (Hareli & Weiner, 2002) or resentment (Feather & Sherman, 2002) are better predictors of Schadenfreude. Van Dijk, Ouwerkerk, Goslinga, Nieweg, and Galucci (2006) reviewed the previous work on the envy-Schadenfreude link, and noticed that research finding an effect of envy on Schadenfreude used hostility-related questions as a measure of envy, while research not finding such an effect used more desire-related questions. Linking the idea of Van Dijk et al. to the research presented in this chapter, it seems straightforward to predict that malicious envy is related to feelings of Schadenfreude, while benign envy is not.

The current approach

These findings are consistent with the findings of Breugelmans and Poortinga (2006) that it is not necessary to have a word for a certain emotion for it to be experienced. They studied the Rarámuri (Mexican Indians), who have only one word that indicates both shame and guilt. Breugelmans and Poortinga used the following procedure to investigate whether the Rarámuri experience this emotion for which they do not have a word. First, emotion specific situations were created among the Javanese (Indonesia) who do have two words for the emotions, to come up with stories that should elicit either shame or guilt. They then asked other Javanese and Dutch students to rate the emotion components, as a baseline for comparison with the responses of the Rarámuri. Finally, the Rarámuri rated the stories, and it was found that despite not having two words for these experiences, they were still clearly felt. Such an elaborate procedure of creating the stories was necessary to prevent biases that might result from using stories created in western countries as test material for the Rarámuri.

The approach used in this chapter (as depicted in Figure 2.1) provides a potentially less elaborate way of studying emotions (or other concepts) cross-culturally. Instead of creating emotion-specific stories in one culture and using those to test for the existence of the emotions in another, the two-step approach proposed here allows to directly investigate cultures that have a single word for multiple concepts, by using the idiosyncratic situations and experience of the participants themselves. For example, the

Rarámuri could be asked to recall a situation in which they experienced *riwérama* (their word for both shame and guilt). I speculate that a latent class analysis on question ratings regarding this story would separate experiences of shame and guilt. In this way, the emotional experience itself is used for analysis, which I believe to be purer, because it is in this experiential content where the difference between emotions resides. Thus, the methodology proposed here holds further promise for theory development on distinguishing related emotion constructs, both within and between cultures.

Conclusion

To conclude, empirical support for the existence of two types of envy was found. One is a malicious envy that motivates to damage the position of the envied person, while the other is benign envy that motivates to attain more for oneself. The findings of this chapter are consistent with the conceptualization of envy as "the great leveler" as put forward by this chapters' opening quote of Sayers (1949). Or, to be more precise, envy *are* the great *levelers*: whereas benign envy levels things up, malicious envy levels them down.

3

The appraisals that distinguish benign and malicious envy

Envy is the frustrating experience that arises from an upward social comparison. Two studies investigated the appraisals that distinguish benign envy (with action tendencies aimed at improving one's own situation) from malicious envy (with action tendencies aimed at pulling down the superior other). Study 3.1 finds that the deservingness and perceived control potential of the situation differ for the types of envy. These were manipulated in Study 3.2, and it was found that both manipulations had no influence on the overall intensity of envy, but did influence the type of envy that resulted. The more undeserved a situation was perceived to be, the more participants experienced malicious envy. Perceived control did not have a direct effect on malicious envy. Benign envy was experienced more when the situation was not undeserved, and the most when the advantage of the other was perceived to be both deserved and the situation perceived to be controllable.

This chapter is based on: Van de Ven, N., Zeelenberg, M., & Pieters, R. (2009a). The appraisals of benign and malicious envy: How and why upward social comparisons lead to constructive and destructive behavior.

Chapter 3.

Envy is a powerful emotion that "arises when a person lacks another's superior quality, achievement, or possession and either desires it or wishes that the other lacked it" (Parrott & Smith, 1993, p. 906). Two types of envy exist: *benign envy*, which is associated with action tendencies aimed at improving one's own situation, and *malicious envy*, which is associated with destructive action tendencies aimed at pulling down the envied person. Across cultures, these two envy types have a distinct experiential content (see Chapter 2), differing in the elicited feelings, thoughts, action tendencies, actions, and emotivational goals. Despite the distinct phenomenology of the envy types, it remains unclear which factors determine whether envy turns out to be benign or malicious. Such knowledge concerning the eliciting conditions for the types of envy is important to fully understand their behavioral implications. Hence, I sought to investigate the appraisals that lead to benign and malicious envy.

According to appraisal theory, emotions can be distinguished based on specific personal evaluations of a situation (called appraisal patterns), that are unique for each emotion (Scherer, Schorr, & Johnstone, 2001). Although some discussion exists concerning the causal role of specific appraisal patterns on the elicitation of emotions, there is no dispute about the fact that emotions and appraisals are related (Frijda & Zeelenberg, 2001; Parkinson, 1997). What is already known about the appraisals related to envy? A key elicitor of envy is a frustrating upward social comparison, that often results in a threat to one's self-view or status (Miceli & Castelfranchi, 2007; Smith & Kim, 2007). Envy is more intense if the domain of comparison is perceived to be important to oneself, and if the envied person is thought to be more similar to oneself (Salovey & Rodin, 1984). These factors do not, however, differentiate benign from malicious envy (see Chapter 2).

In Chapter 2 the recalled experiences of benign and malicious envy were content analyzed, and differences were found with respect to the perceived fairness of the advantage of the envied person and the perceived control potential over the situation that had triggered the envy. It remains untested, however, whether these appraisals actually determine which of the two types of envy is elicited. The stories were content analyzed on

whether the envious episodes contained hints that the situation was perceived to be unfair or not, based on ideas of Smith (2004) that perceptions of unfairness are a key component of envy. The disadvantage is that participants themselves had not rated their experiences, neither were the appraisals manipulated directly, to test whether they influenced the types of envy that would arise. The current studies aim to do so.

Note that Smith (2004) talked about perceptions of unfairness as a key antecedent of envy. Others, however, considered deservingness to be at the core of envy (Ben-Ze'ev, 1990; Ortony et al., 1988, Smith et al., 1994). Perceptions of fairness and deservingness are closely related, but do differ in some aspects. Deservingness relates more to a subjective evaluation of the situation than fairness does: if a tennis player wins from a better player because the better player had to give up due to an injury, this is fair according to the rules, but also undeserved. This more subjective perception of undeservingness seems more characteristic of envy, and deservingness will therefore be studied in this chapter. Furthermore, deservingness has recently been identified as a key appraisal for eliciting certain emotions (Feather & McKee, 2008). Let me first describe these two factors of perceived deservingness and perceived control potential in somewhat more detail, and then explain why these are likely to be the core determinants of which type of envy is elicited.

Deservingness refers to a judgment of outcomes based on the actions or qualities that led to these outcomes; situations are deserved if good actions led to good outcomes or bad actions to bad outcomes, and undeserved when there is a mismatch between the valence of actions and outcomes (Feather, 2006). The deservingness of the situation provides information as to which emotion will be elicited (Feather & McKee, 2008), and can thus be considered to be an appraisal. For example, a deserved positive outcome can lead to feelings of pride, while a similar but undeserved outcome can lead to feelings of guilt.

Feelings of undeservingness have theoretically been linked to envy quite often, with several authors claiming that undeservingness is a key component of envy (Ben-Ze'ev, 1992; Ortony et al., 1988). Consistent with this are findings that subjective injustice is indeed related to typical envy

experiences, such as depressive and hostile feelings (Cohen-Charash & Mueller, 2007; Smith et al., 1994). Envious people also became less cooperative towards someone who was undeservedly better off, but not when the advantage of the other had been justified (Parks et al., 2002). A clear link thus seems to exist between perceptions of undeservingness and the hostile component of envy. Therefore, I think it likely that upward comparisons with persons who are perceived not to deserve the advantage will elicit malicious envy, while comparisons with those who are perceived to deserve the advantage will elicit benign envy. This leads to the prediction that the more deserved an upward social comparison is perceived to be, the more an envious person will experience the benign type, and the more undeserved it is perceived to be, the more an envious person will experience the malicious type.

Note that these predictions are at odds with the (untested) predictions of others. Ben-Ze'ev (1990) reasoned that if an advantage of another person is perceived to be deserved, the resulting envy will be less intense, as there is less reason to feel frustrated because the other is just better. In contrast to this, Miceli and Castelfranchi (2007) theorize that the more deserved it is perceived to be that the other has something one lacks, the *more* intense the envy will be. After all, an envious person who is outperformed by someone who really is much better, might feel especially frustrated. I, however, predict that the intensity of the envy will not be affected by the perceived deservingness of the situation, but that only the type of envy that is elicited will be influenced by it.

Another appraisal that could be important in determining which type of envy is elicited, is the control potential (Roseman, Antoniou, & Jose, 1996). In my view, this appraisal of whether a situation can be changed seems relevant for envy. As early as 1597, Bacon already stated that envy would be strongest for those who feel they cannot improve their situation. Similarly, Rawls (1971) argued that envy would become hostile when people have no opportunity to act constructively. Others go even further and argue that low perceived control is a *necessary* condition for envy to occur (Ortony et al., 1988; Smith, 1991). Note, however, that these authors only refer to malicious envy as "envy proper", and do not consider the

benign type of envy to actually be envy. They would thus likely predict that less perceived control leads to more *malicious* envy. I agree, but also predict that in situations of high perceived control, benign envy will be more likely.

Study 3.1 examined whether the appraisals of deservingness and perceived control potential are indeed associated with natural occurring experiences of benign and malicious envy. Study 3.2 manipulated these two appraisals independently, and measured whether they led to the predicted different experiences of envy. Support for the reasoning outlined above would reveal how the deservingness of the other's advantage and the control over one's own outcome jointly determine whether upward social comparisons lead to benign or malicious envy, and therefore also to constructive or destructive subsequent behavior.

Study 3.1

Forty-four participants (25 females, M_{age} = 19.6 years) recalled and described either an experience of Benign Envy (n = 22) or one of Malicious Envy (n = 22). On the next page they indicated how deserved they had perceived the situation to be (-4 very undeserved; +4 very deserved), and whether they had felt that they had control over the situation (-4 definitely had no control; +4 definitely had control).

Participants who recalled an experience of Malicious Envy indicated it to be more undeserved (M = -2.18, SD = 1.89) and lower in perceived control potential (M = -2.45, SD = 2.13), than those who recalled experiences of Benign Envy ($M_{deservingness}$ = -0.32, SD = 2.36, $t(42) = 2.89$, $p = .006$, $d = 0.87$; $M_{perceived\ control}$ = -0.41, SD = 2.59, $t(42) = 2.86$, $p = .007$, $d = 0.86$). Of course, these data only reveal that the appraisals of deservingness and perceived control are related to the different types of envy, and do not yet show that they also shape the experience. This is examined in Study 3.2, in which the appraisals were manipulated and the subsequent experiences of benign and malicious envy were measured. Chapter 2 also found that benign and malicious envy were equally intense as experiences. Based on this finding it was also predicted that the manipulations of deservingness and control potential would not influence the intensity of the experienced envy, but only by the type of envy that was experienced.

Study 3.2

Method

A total of 282 participants (173 females, M_{age} = 19.9 years) were randomly assigned to one of the conditions of a 3 (Deservingness: Undeserved vs. Neutral Deserved vs. Deserved) × 3 (Control Potential: Low vs. Medium vs. High) design (with n = 30 to 33).

Participants read a scenario in which a coworker received a raise while the participant did not. This raise was either undeserved (because the coworker reels in less clients), neutrally deserved (because the coworker has one big client that regularly places an order), or it was deserved (because the coworker reels in more clients). Control Potential was manipulated by providing information that the next evaluation for a possible raise is in a year (Low Control), providing no information on the next raise (Medium Control), or that the next possibility was in three months (High Control). An example of the scenario (the Low Control and Undeserved condition) is:

> You and some fellow students are working in a call center to earn some extra money. The call center is part of a big office supplier and targets large companies. It is your job to contact existing clients for new orders, and to reel in some new clients.
>
> As performance is important for management, everyone is evaluated on a yearly basis, and your wage for the upcoming year is determined based on this evaluation. Last week the evaluations took place and your new wage is set.
>
> There is one thing that frustrates you: One of your coworkers, whom you often hang out with and get along with reasonably well, ends up receiving a higher wage than you, despite the fact that the evaluation actually shows that your coworker reels in less clients and sells less as well.

After having read the scenario, the participants responded to a number of questions. Except if otherwise noted, all questions were rated on 9-point scales (from 0 = not at all to 8 = very much so). As manipulation checks the participants indicated whether they had felt that the situation was deserved (-3 undeserved; +3 deserved), and whether they would have

felt control over the situation (-3 definitely not; +3 definitely so). The overall intensity of the envy was assessed by "how jealous would you be toward your coworker", which was not expected to differ across the conditions. I asked for jealousy instead of envy, because this term is most often used in colloquial language to indicate envy (Smith et al., 1988). Benign and malicious envy were measured with two questions each, based on differences in the experiential content of the emotion found in Chapter 2. Benign envy was assessed by asking whether they "would be inspired" and whether they "would start to work harder," $r(282) = .52$, $p < .001$. Malicious envy was assessed by asking whether they "would secretly wish that their coworker would lose clients" and "would you gossip about the coworker to others," $r(282) = .40$, $p < .001$.

Results

Manipulation checks. As predicted, the ratings of the jealousy felt towards the coworker were similar across conditions, all F's < 1, $M_{\text{jealousy}} = 4.20$, SD = 2.17, suggesting that the manipulations did not influence the intensity of the experienced envy.

The manipulations worked as intended (see Table 3.1). The deservingness of the situation was only influenced by the manipulation of Deservingness, $F(2, 273) = 110.45$, $p < .001$, $\eta_p^2 = .45$, and not by the manipulation of Control Potential nor their interaction, F's < 1. Post hoc LSD analysis found that the Undeserved conditions were perceived to be less deserved than the Neutral Deserved conditions, $p = .001$, and the Neutral Deserved conditions were again perceived to be less deserved than the Deserved conditions, $p < .001$.

Table 3.1 Manipulation Checks and Experienced Types of Envy per Condition in Study 3.2

		IV: Deservingness							
		Undeserved		Neutral Deserved		Deserved		*Condition Mean*	
DV	IV: Control Potential	M	(SD)	M	(SD)	M	(SD)	*M*	*(SD)*
Deservingness	Low Control	-2.23	(0.90)	-0.03	(1.77)	1.12	(1.45)	*-0.34*	*(1.98)*
	Medium Control	-2.23	(1.15)	-0.23	(1.67)	1.00	(1.77)	*-0.48*	*(2.04)*
	High Control	-2.00	(1.27)	-0.45	(1.54)	1.13	(1.65)	*-0.44*	*(1.95)*
	Condition Mean	*-2.15*	*(1.11)*	*-0.24*	*(1.65)*	*1.09*	*(1.61)*	*-0.42*	*(1.98)*
Perceived Control	Low Control	-0.37	(1.79)	0.31	(1.86)	0.50	(1.98)	*0.16*	*(1.90)*
	Medium Control	0.13	(1.98)	0.39	(1.45)	1.26	(1.44)	*0.59*	*(1.70)*
	High Control	0.03	(1.99)	0.73	(1.66)	1.71	(1.32)	*0.82*	*(1.80)*
	Condition Mean	*-0.07*	*(1.92)*	*0.48*	*(1.66)*	*1.15*	*(1.67)*	*0.52*	*(1.81)*
Malicious Envy	Low Control	3.93	(1.80)	3.13	(1.74)	2.95	(1.76)	*3.32*	*(1.80)*
	Medium Control	3.87	(2.28)	3.24	(2.24)	2.19	(1.73)	*3.10*	*(2.19)*
	High Control	4.06	(2.13)	2.83	(1.94)	2.29	(1.54)	*3.06*	*(2.01)*
	Condition Mean	*3.96*	*(2.06)*	*3.06*	*(1.97)*	*2.48*	*(1.70)*	*3.16*	*(2.00)*
Benign Envy	Low Control	3.58	(1.54)	5.39	(1.34)	4.94	(1.75)	*4.66*	*(1.71)*
	Medium Control	2.56	(1.73)	5.26	(1.22)	5.24	(1.71)	*4.35*	*(2.01)*
	High Control	3.53	(3.22)	5.20	(1.57)	5.94	(1.33)	*4.89*	*(1.87)*
	Condition Mean	*3.22*	*(1.76)*	*5.28*	*(1.37)*	*5.37*	*(1.64)*	*4.64*	*(1.87)*

Perceived Control was influenced by the manipulation of Control Potential, $F(2, 273) = 3.67$, $p < .027$, $\eta_p^2 = .03$. LSD post hoc analysis found that the Medium and the High Control conditions did not differ on the perceived control, $p = .366$. The main effect of this manipulation was driven by the lower perceived control in the Low Control condition, which was marginally lower compared to the Medium Control, $p = .090$, and significantly lower compared to the High Control condition, $p = .009$. An unexpected effect emerged of the manipulation of Deservingness on perceived control, $F(2, 273) = 11.60$, $p < .001$, $\eta_p^2 = .08$. Those in the Undeserved conditions perceived less control than those in the Neutral Deserved conditions, $p = .033$, and the perceived control in the Neutral Deserved conditions was lower from that in the Deserved conditions, $p = .008$.

To summarize, perceived deservingness was indeed influenced by the Deservingness manipulation. Perceived control, however, was influenced by both the Deservingness and Perceived Control manipulation. The unexpected effect of the Deservingness manipulation on perceived control seems likely to be caused by the uncertainty of the situation: if another person can actually receive a benefit when performing badly, there is also the risk that one is not rewarded after performing well. In this way, an undeserved outcome might also indicate a lower perceived control.

Benign and malicious envy. As can be seen in Table 3.1, the manipulations had an effect on the type of envy that would be elicited. Malicious envy was only influenced by the manipulation of Deservingness, $F(2, 273) = 13.91$, $p < .001$, $\eta_p^2 = .09$, not by the manipulation of Control Potential nor the interaction between the two, F's < 1. LSD post hoc analysis found that people experienced more malicious envy in the Undeserved conditions than in the Neutral Deserved conditions, $p = .002$, while those in the Neutral Deserved conditions experienced more malicious envious than those in the Deserved conditions, $p = .039$.

For the experience of benign envy, the results are more complex. There is a main effect of Deservingness, $F(2, 273) = 55.41$, $p < .001$, $\eta_p^2 = .29$, a marginal main effect of Control Potential, $F(2, 273) = 2.71$, $p = .068$, $\eta_p^2 = .02$, and an interaction effect between the two, $F(4, 273) = 2.46$, $p = .045$, η_p^2

= .04. The effect of the Deservingness manipulation on the elicitation of benign envy is substantial; LSD post hoc analysis found that those in the Undeserved conditions experienced far less benign envy than those in the Neutral Deserved conditions, $p < .001$ and those in the Deserved conditions, $p < .001$. These latter conditions did not differ, $p = .711$. The marginal effect of the Control Potential manipulation was driven by the unexpected lower score on benign envy in the Medium Control conditions compared to the High Control conditions, $p = .019$. Benign envy in the Low Control conditions did not differ from the Medium and High Control conditions, p's $\geq .186$.

The interaction effect of the two manipulated variables is caused by two processes. First, when the situation was undeserved, participants in the Medium Control condition experienced less benign envy than those in the Low and High Control conditions, p's $\leq .028$. Second, in the Deserved conditions, those in the High Control condition experienced more benign envy than those in the Low Control, $p = .016$, and marginally more than those in the Medium Control condition, $p = .093$. I have no clear explanation for the first result. For the second result, it seems likely that situations that are both deserved *and* perceived to be controllable will lead to benign envy the most.

To test the influence of perceived deservingness and control potential independently, the manipulation checks were regressed on both types of envy. This analysis found that for malicious envy, only deservingness had an effect, $\beta = -.35$, $p < .001$, while perceived control had not, $\beta = -.08$, $p = .161$. For benign envy both had an effect, albeit a stronger one for deservingness, $\beta = .43$, $p < .001$, than for perceived control, $\beta = .13$, $p = .026$.

Like in Chapter 2, the experiences of benign and malicious envy were negatively correlated, $r(282) = -.18$, $p = .002$. This shows that the more a person experiences one type of envy, the less the other type is experienced. This again confirms that the types of envy tend to be (somewhat) exclusive.

Discussion

The current results confirm the predictions, but add new and unexpected insights too. First of all, the perceived deservingness of the situation is a key factor in determining which type of envy will be elicited. The more

undeserved a situation is, the more malicious envy is elicited. The more deserved it is, the more benign envy is elicited. Perceived control potential over the situation had an effect on benign envy; more perceived control led to more benign envy. Note that across all conditions the jealousy ratings were equally high, suggesting that the general intensity of the emotion is not influenced by the perceived deservingness or control potential. This stands in contrast to the predictions that deservingness might lead to less (Ben-Ze'ev, 1990) or more (Miceli & Castelfranchi, 2007) envy.

Because the action tendencies of benign envy are constructive and those of malicious envy destructive, finding the appraisals that differentiate the two envy types is important in order to predict, and perhaps influence, people's behavior following upward comparisons. The results of Study 3.2 indicate that only when the situation is perceived to be undeserved, malicious envy is more likely. Although a combination of high deservingness and high perceived control elicits the most benign envy, an envy situation that is appraised as "not undeserved" will usually trigger benign envy and therefore constructive subsequent behavior.

Although there might be more factors that can influence whether benign or malicious envy exists, I consider it likely that the effects of these factors will usually have an influence *via* deservingness. For example, it seems likely that a person more easily becomes maliciously envious towards a disliked person. I predict this to be the case because an advantage of a disliked person would be more easily perceived to be less deserved.

Finding the appraisals that distinguish between the two types of envy also provides insight into who might be more prone to experiencing each type of envy after an upward social comparison. People who tend to feel entitled to many things (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004) are likely to more easily find it undeserved that another has an advantage over them, and are thus more likely to experience malicious instead of benign envy. In contrast, people with a high "belief in a just world" (Rubin & Peplau, 1975) feel that people generally get what they deserve and are therefore expected to experience benign envy more easily in envy situations. Furthermore, people with an internal locus of control (Duttweiler, 1984) tend to feel that they can easily influence situations

themselves, and might thus be especially likely to experience benign envy. Investigating which persons are likely to turn hostile or who gets inspired after being confronted with persons who outperform them seems an interesting line of study.

A question that remains is why the effect of the perceived control potential in Study 3.1 is equally strong as that of deservingness, while it is non-existent for malicious envy and much smaller for benign envy in Study 3.2. One reason might be that the experience of benign envy itself increased the perceived control potential, instead of the other way around. Thus, perceived control might not be an appraisal of envy, but it might be a consequence of it: those who are benignly envious might become more motivated to attain more for themselves, and perceive the situations to be more controllable as a result. Further research could clarify the causal link.

The research presented in this chapter investigated which appraisals differentiate benign and malicious envy. The core finding that the perceived deservingness of the situation matters the most, gives an important insight into harnessing the potential destructiveness of envy, and to perhaps even turn it into something good. Evaluating the positive outcomes of someone else as deserved prevents possible negative behavior following envy, and is actually likely to inspire people to work harder and attain more for oneself.

4

When and why envy outperforms admiration

Five studies tested the implications of experiencing benign envy, and support the hypothesis that benign envy, but not admiration or malicious envy, improves subsequent performance. Study 4.1 found that when participants recalled making an upward comparison to someone, only the experienced benign envy at that moment was related to an increased motivation to study more in the next semester. In Study 4.2 the emotions were induced via an emotion recall task and in Study 4.3 by asking participants to imagine feeling the emotion towards a high achiever, and performance was measured via the Remote Associates Task (measuring intelligence/creativity). The benignly envious consistently performed better than those admiring someone, those being maliciously envious, or those in a control condition. This effect was not due to the general negative affect that is part of benign envy, because the equally negative experience of malicious envy did not improve performance. Study 4.4 showed that an upward social comparison only triggered benign envy (resulting in the motivation to perform better) when people thought that improvement was attainable, not when they thought this was difficult. Finally, Study 4.5 showed that the initial response to an upward comparison in an important domain is envy, and that this transforms into admiration once people consider the coveted object to be unattainable. Implications of these findings for theories of social emotions such as envy, social comparison, and for understanding the influence of role models are discussed.

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Chapter 4.

"Admiration is happy self-surrender; envy is unhappy self-assertion."
Søren Kierkegaard (1849/2008, p. 71)

Although people generally consider it a virtue to admire and a vice to be envious, Kierkegaard's assertion may lead to the quite opposite prediction, namely that envy is a more productive emotion than admiration is. Put differently, admiring someone feels positive but may not lead to a motivation to improve oneself *(happy self-surrender)*, whereas being envious of someone feels frustrating and as such may promote a motivation to improve oneself *(unhappy self-assertion)*. This counterintuitive idea that the vice envy may outperform the virtue admiration was the guiding principle in the current research. Let me first explain why admiration is unlikely to stimulate performance, while envy is.

Admiration is a feeling of delighted approval of the accomplishment or character of another person, and has inspiration as its motivational output (Algoe & Haidt, 2009; Keltner & Haidt, 1999). Inspiration "involves the transcendence of the ordinary preoccupations or limitations of human agency" (Thrash & Elliot, 2003, p. 871). In other words, admiration is likely to lead to feelings of connectedness to the other person, to openness, and to increased energy levels (Hart, 1998; Thrash & Elliot, 2004). Algoe and Haidt found that people who admired someone reported that they felt motivated to do better. Self-help websites also tout the motivating power of admiration; for example Galozzi (2009) at www.personal-development.com states that admiration is a stepping stone that raises people to a higher level.

But is it really the case that admiration stimulates people to do better? Although some research seems to point to motivating effects of admiration, no research actually investigated the behavioral consequences of admiration. Furthermore, there is reason to believe that admiration is not likely to increase one's motivation to perform better. According to the broaden-and-build model of emotions (Fredrickson, 1998) positive emotions generally broaden one's focus on the problem at hand, and they lead to a future oriented view. The positive emotion of admiration is therefore indeed likely to lead to inspiration, in the sense that it activates transcendence and a general approach motivation, broadening one's repertoire for future actions. It is, however, not likely to directly activate

motivational tendencies to perform better, as such more direct reactions are generally the consequences of negative emotions.

Research on upward social comparisons confirms that positive feelings can lead to inspiration, but not to motivation: The more positive people felt following an upward social comparison, the more inspired they indicated to be (Lockwood & Kunda, 1997). However, the more negative they felt about themselves following an upward comparison, the more they actually worked harder and performed better (a "no pain, no gain" principle, Johnson & Stapel, 2007a). Apparently, positive feelings arising from an upward comparison increase inspiration, while it are the negative feelings that increase actual motivation and performance. Based on this research on upward comparisons and the work of Fredrickson (1998) that suggests that it are negative emotions that generally lead to quick responses focused on solving the immediate problem at hand, it was hypothesized that it is more likely to be the case that it is a negative emotion, such as envy, that leads to a motivation to work harder following an upward social comparison.

Envy is the emotion that "arises when a person lacks another's superior quality, achievement, or possession and either desires it or wishes that the other lacked it" (Parrott & Smith, 1993, p. 906). Envy is thus accompanied by the goal to level the difference with the superior other. Interestingly, however, this can be accomplished via either moving-up oneself on the crucial dimension of comparison, or by pulling down the other. These latter effects have been documented in the literature quite frequently (Duffy & Shaw, 2000; Parks et al., 2002; Schaubroeck & Lam, 2004; Smith et al., 1994; Smith et al., 1996; Van Dijk et al., 2006; Vecchio, 2000; Wert & Salovey, 2004), but reviews of envy research have not documented any positive effects that may stem from envy (Miceli & Castelfranchi, 2007; Smith, 2008; Smith & Kim, 2007). Recent studies however reported findings consistent with the idea that envy can contain the seeds of the motivation to improve (see Chapter 2).

Chapter 2 had found empirical support for the idea that two types of envy exist. The most important difference between the types is that benign envy contains action tendencies aimed at improving oneself, whereas in the other type, malicious envy, the action tendencies are aimed at degrading the

other person. It is more likely that people experience benign envy if the advantage of the other is appraised to be deserved, whereas they are more likely to experience malicious envy the advantage is appraised to be undeserved (see Chapter 3).

The idea that benign envy motivates people to perform better when they are outperformed extends the "no pain, no gain" theorizing by Johnson and Stapel (2007a). Where they argue that some frustration and self-threat is necessary for upward comparisons to stimulate performance, there is reason to believe that pain by itself is not sufficient, because that is present both in benign and malicious envy. This idea is based on the research in Chapter 2 that showed that malicious envy, another frustrating emotion stemming from upward social comparison, is not associated with a self-reported motivation to improve, but rather with motivations aimed at pulling down the other. In this case there is emotional pain but without the motivational gain. Therefore the hypothesis was that it would be the specific sting of benign envy that motivates people to do better. The relation between the current work on affective reactions following upward comparisons to the literature on social comparisons is discussed more extensively in the general discussion. of this chapter

The current ideas are developed from a feeling-is-for-doing account of emotions. Such a functional approach defines emotions as responses to problems or opportunities that arise in the environment (Keltner & Haidt, 1999; Zeelenberg & Pieters, 2006). From this viewpoint, benign envy is triggered when people realize that they are outperformed on something that is important to them, which threatens their status. Restoring this is important for people (Tesser, 1988), and benign envy and the motivations it activates helps to do so. Malicious envy is another emotional response that restores this loss in status, but it tends to trigger more destructive tendencies aimed at pulling down the other person (Parks et al., 2002; Smith & Kim, 2007). What the functional benefits of admiration are is as of yet unclear, as some think that it motivates people to do better (Algoe & Haidt, 2009), but the current findings suggest otherwise.

To summarize, it was predicted that only benign envy and not feelings of admiration or malicious envy, would improve people's performance. This

was first examined in a study in which participants recalled an upward comparison, after which the experienced emotions and the motivation to perform were measured. After this, the hypothesis was tested in two studies in which benign envy, malicious envy, and admiration were induced via recalling an episode of these emotional experiences or via an imagination task. A control condition was included to create a baseline measure of performance. In the final two studies the self-surrendering nature of admiration was investigated in further detail, as will be explained later.

Study 4.1

In order to examine whether experiencing benign envy indeed leads to a motivation to improve oneself, students intended study effort for the upcoming semester was assessed after they made an upward social comparison. The current studies were run in the Netherlands. In the Dutch language (but also in other languages such as German, Polish, and Thai) there are separate words for benign envy (*benijden*) and malicious envy (*afgunst*), which facilitated measuring precisely these experiences (see Chapter 2). Participants recalled an instance in which someone else was better than they were. By recalling a certain situation in which emotions are felt, the action tendencies of these emotions are also activated again (Matelesta & Izard, 1984; Strack, Schwarz, & Gschneidinger, 1985). Because benign envy is the only emotion following upward comparison that is thought to include action tendencies aimed at trying to do better, only the intensity of the benign envy in the recalled situation was expected to be related to the motivation to improve oneself.

Method

Seventeen undergraduate students were asked to describe a person they knew well, who was better at something than they were. After this, they indicated how much they were benignly envious of this person, how much they were maliciously envious of this person, and how much they admired this person (1 = not at all; 7 = very much so). The questions were presented in a random order for each participant. After this initial study, a new study ostensibly started that measured their motivation. In it, they

were asked to indicate how many hours a week more or less they planned to spend on their study in the next semester than they had done in the previous semester.

Results and discussion

In general, participants indicated that they felt quite some admiration toward the person who outperformed them (M = 5.00, SD = 1.00), but also clearly some benign envy (M = 3.47, SD = 1.74), and a little malicious envy (M = 2.00, SD = 1.06). It is not surprising that participants indicated to have experienced admiration the most in absolute terms, given that admiration is a rather socially desirable response and the two types of envy are not. Of greatest interest was how the variation in the intensity of the experiences of these emotions related to the motivation to improve. On average, the participants planned to study 2.47 hours more in the upcoming semester than they currently did, which was not significantly different from zero, $t(16) = 1.11$, $p = .282$. A regression analysis with the experienced emotions as predictors and the planned increase in study hours as the dependent variable, revealed that only benign envy, β = .54, $p = .043$, but not admiration, β = -.10, $p = .660$, nor malicious envy, β = .07, $p = .781$, led to a motivation to spend more time studying[1]. This is a first indication that after being outperformed, benign envy increases the subsequent motivation to perform while admiration and malicious envy do not.

Study 4.2

This study was designed to replicate and extend these initial findings from behavioral intentions to actual performance on the Remote Associates Task (RAT; McFarlin & Blascovich, 1984; Mednick, 1962). The RAT consists of a number of items (18 in this case), for which the participant is asked to think of a word that relates to three given words (for example, with "coffee, cake,

[1] There is no risk of multicollineairity, as none of the emotions are significantly related to each other; for admiration and benign envy, $r(17) = -.11$, $p = .680$, for admiration and malicious envy, $r(17) = -.06$, $p = .822$, and not for benign and malicious envy, $r(17) = .37$, $p = .140$. The mean number of hours students indicated to have spend studying in the previous semester (21.29 hours) was not influenced by any of the emotions, all p's ≥ .297, suggesting that the intensity of the emotions was unrelated to perceptions of current performance.

butter" given, "cup" would be the correct answer). Performance on this task can increase when participants are more motivated, for example when they concentrate more or spend more time on the task. It was predicted that participants who recalled an experience of benign envy would become more motivated to do well and to answer more items correctly as a result.

As an additional extension, emotions in this study were experimentally induced via an emotion recall task (Matelesta & Izard, 1984; Strack et al., 1985). Participants who recalled being benignly envious were expected to perform better on the RAT than those who recalled admiring someone, those being maliciously envious, or those in a control group.

The pleasantness of the recalled experience and the perceived deservedness of the advantage of the other in the recalled situation were assessed as well. Admiration was expected to have felt more positive to the participants than benign and malicious envy had. Furthermore, it was predicted that participants who were writing about an instance of benign envy would consider the recalled situation to be more deserved than those writing about an instance of malicious envy. These constructs were predicted to mediate the effect on performance (valence for benign envy compared to admiration; deservingness for benign envy compared to malicious envy).

Method

Eighty-six participants[2] took part in a four-group design, with a Benign Envy (n = 22), an Admiration (n = 22), a Malicious Envy (n = 21), and a Control condition (n = 21). After recalling an experience of benign envy, malicious envy, or admiration, participants in these conditions indicated how positive or negative the recalled emotion had felt (-3 very negative, +3 very positive), and how deserved they felt that it was that the other person had an advantage over them (-3 very undeserved, +3 very deserved). Next, an ostensibly unrelated study started, which was the RAT. It was introduced as "an important instrument used to measure creativity and leadership." In the Control condition no previous experience was recalled.

[2] One participant who indicated to have never experienced malicious envy was dropped from the analysis.

Results and discussion

As shown in Table 4.1, the admiration experiences clearly felt more positive to the participants than did both types of envious experiences (which felt equally negative). Furthermore, the participants who recalled an instance of malicious envy had found it undeserved that another person had an advantage over them, while those who recalled an instance of benign envy or one of admiration had considered it to be deserved (for admiration more so than for benign envy).

Table 4.1 Pleasantness of the emotional experience and deservingness of the recalled experience per condition in Study 4.2

	Pleasantness		Deservingness	
Condition	M	(SD)	M	(SD)
Benign Envy	-0.86[a]	(1.73)	0.95[b]	(1.91)
Admiration	1.82[b]	(0.96)	2.36[c]	(0.85)
Malicious Envy	-1.24[a]	(1.26)	-1.00[a]	(1.18)
	$F(2, 62) = 32.98$, $p < .001$, $\eta_p^2 = .52$		$F(2, 62) = 31.60$, $p < .001$, $\eta_p^2 = .51$	

Note. Standard deviations between brackets. Superscripts indicate differences between conditions tested with LSD post hoc comparisons with all p's < .001.

The left panel of Figure 4.1 shows the average number of correct answers on the RAT per condition. An ANOVA revealed a significant effect of condition, $F(3, 82) = 6.24$, $p = .001$, $\eta_p^2 = .19$. As predicted, post hoc LSD analysis found that participants in the Benign Envy condition performed better ($M = 11.38$) than those in the Admiration ($M = 9.82$, $p = .024$), the Malicious Envy ($M = 8.48$, $p < .001$), and the Control condition ($M = 9.33$, $p = .004$). These latter three conditions did not differ significantly from each other (all p's ≥ .054)[3].

Figure 4.2 displays mediation analyses that further support that benign envy but not admiration nor malicious envy elevates performance. A main difference between benign envy and admiration is that the former feels negative while the latter feels positive. The effect of benign envy on

[3] Participants in the Admiration condition performed marginally better than those in the Malicious Envy condition, $p = .054$. Because this effect was not found in Study 4.3, this is not considered to be a meaningful difference.

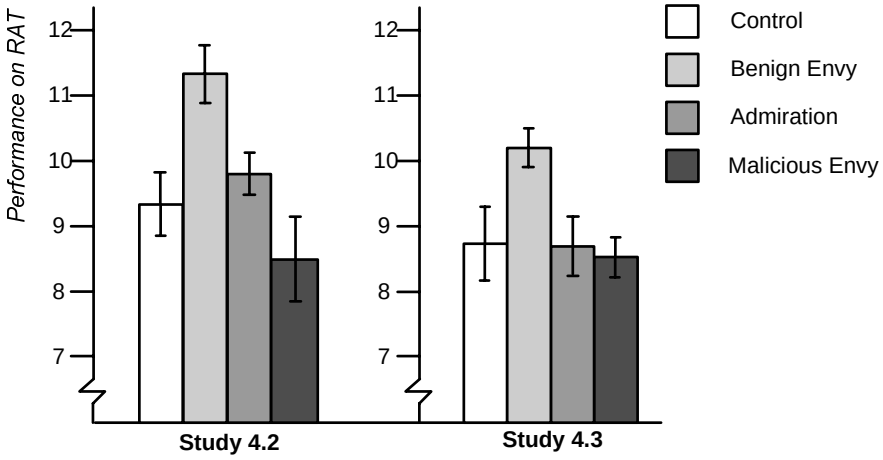

Figure 4.1 Motivational effects per emotion condition in Studies 4.2 and 4.3.

Note. Error bars represent ±1 standard error of the mean. Post hoc analysis found that in each experiment the Benign Envy condition scores higher on the performance measure than each of the other conditions, none of the other conditions differ significantly.

performance compared to that of admiration was completely mediated by the valence of the experience, the direct effect becoming insignificant when valence was included in the test, Sobel $z = 2.71$, $p = .007$. This is consistent with the "no pain, no gain"-principle of Johnson and Stapel (2007a) that some frustration is necessary for an upward comparison to stimulate performance. However, benign and malicious envy felt equally negative, and because malicious envy did not increase performance, frustration is clearly not sufficient for an upward comparison to stimulate performance. If it is indeed not the "pain" itself but something in benign envy that increased performance, than a difference in the experiences of benign and malicious envy, such as the deservingness of the situation, should mediate the effect on performance, which is what was found, Sobel $z = 1.89$, $p = .059$. That this mediation is only partial makes sense theoretically, because the deservingness of the situation is an important, but not the only appraisal that distinguishes benign from malicious envy (see Chapters 2 and 3).

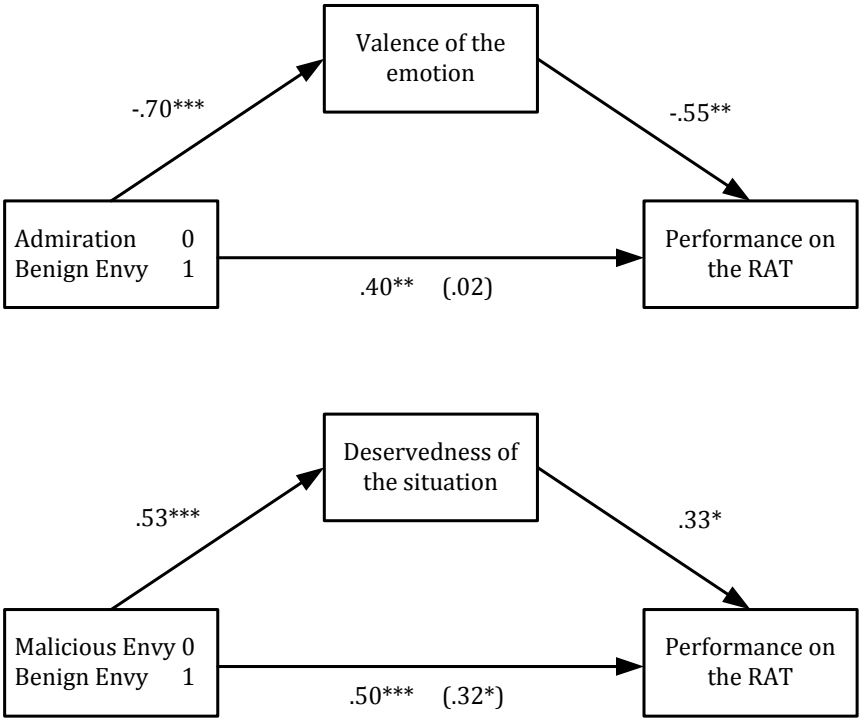

Figure 4.2 Mediation analyses in Study 4.2

Note. *** $p < .001$, ** $p < .01$, * $p < .05$. Regression coefficients are standardized β-weights.

Study 4.3

A drawback of the recall procedure used in Study 4.2 could be that the participants might not only report on different emotions but also on different social comparison others (for example, professional musicians in the admiration condition and fellow amateur musicians in the envy condition). Such possible differences in comparison others might have affected the results. This possibility is prevented in Study 4.3 by using one and the same situation for all participants and asking them to describe how they would feel and react if they would experience benign envy, admiration, or malicious envy in that situation. The RAT was again used as the measure of performance, but now the time participants worked on the task was also recorded. This allowed for exploring whether the better performance in the benign envy condition was caused by an increase in persistence.

Method

Ninety-six students of Tilburg University took part in a series of studies of which the current study was part. They were randomly assigned to a Benign Envy, an Admiration, a Malicious Envy, or a Control condition (*n* = 24 per condition). The participants first read a story about a fellow student, "Hans de Groot" (Johnson & Stapel, 2007b). In the three emotion conditions a fake news article described Hans as an excellent student from Tilburg University who had just won a prize in a prestigious student competition. Hans was selected for the competition because of his excellent grades and wide-ranging extracurricular activities, and had won because of his "remarkable intellectual abilities shown during the completion of a variety of tasks." The participants in the three emotion conditions were asked to imagine that "Hans is a fellow student, and you feel strong *benign envy / admiration / malicious envy* toward him. Please take some time to describe how you would feel, how you would react, what you would do if you would meet him, etc." In the Control condition, participants read about Hans as an average student who had participated in the student competition and had performed reasonably well, in no way had he stood out (positively or negatively) during the tasks of the competition.

After participants had imagined and described how they would feel towards Hans, they responded to three manipulation checks by indicating how much they would feel benign envy, admiration, and malicious envy towards Hans (1 = not at all, to 9 = very much so)[4]. Next they were told they could work on the RAT "for a maximum of five minutes, or if you finish early or cannot find any new answers you can continue to the next study before the five minutes are over."

Results and discussion

Manipulation checks. Table 4.2 presents the manipulation checks. Differences between conditions existed on all three measures, and the manipulated emotion was always the dominant emotion in the corresponding condition. Inspection of the results also shows that

[4] The order was counterbalanced, which had no influence on the results whatsoever, $F(15, 243) = 0.72$, $p = .730$, $\eta_p^2 = .04$.

participants in the Benign Envy condition indicated to feel quite some admiration and malicious envy. Nevertheless, they did indicate (somewhat) more benign envy than admiration, paired-$t(23) = 1.81$, $p = .084$, and malicious envy, paired-$t(23) = 2.73$, $p = .012$.

Table 4.2 Manipulation checks of Study 4.3

	Experienced Emotion					
	Benign Envy		Admiration		Malicious Envy	
Condition	M	(SD)	M	(SD)	M	(SD)
Control	3.75^{a}	(2.17)	4.63^{a}	(1.93)	2.63^{a}	(1.35)
Benign Envy	6.25^{b}	(1.75)	5.33^{ab}	(1.69)	5.52^{b}	(1.98)
Admiration	4.92^{a}	(2.21)	6.04^{b}	(1.92)	3.54_{a}	(1.96)
Malicious Envy	4.88^{a}	(2.23)	4.71^{a}	(2.14)	5.96^{b}	(2.26)
	$F(3, 92) = 5.69$, $p = .001$, $\eta_p^2 = .16$		$F(3, 92) = 2.57$, $p = .044$, $\eta_p^2 = .08$		$F(3, 92) = 15.34$, $p < .001$, $\eta_p^2 = .33$	

Note. The experienced emotion is measured on a scale from 1 = not at all to 9 = very much so. Superscripts indicate differences between conditions, LSD post hoc comparisons p's < .05.

Motivation and performance. As shown in the right panel of Figure 4.1, the predicted differences between conditions in performance on the RAT were found again, $F(3, 92) = 3.52$, $p = .018$, $\eta_p^2 = .10$. LSD post hoc analysis revealed that participants in the Benign Envy condition performed better ($M = 10.21$) on the RAT than those in the Admiration condition ($M = 8.71$, $p = .012$), the Malicious Envy condition ($M = 8.54$, $p = .005$), and the Control condition ($M = 8.75$, $p = .014$). As before, these latter three conditions did not differ (all p's ≥ .772) [5].

Figure 4.3 shows the time spent working on the RAT. Each step down in the lines from left to right indicates that a participant voluntarily stopped working on the task. The results of a survival analysis[6] (Kaplan & Meier, 1958) confirmed the prediction that participants in the Benign Envy

[5] Performance on the RAT in Study 4.3 was slightly worse than in Study 4.2, probably because the maximum duration of five minutes was added in Study 4.3.

[6] A survival analysis is the preferred method of analysis, because the data is not normally distributed due to the maximum duration of five minutes (Mantel, 1966). However, an ANOVA with the emotion condition as the between subjects variable and the time spent working on the RAT as the dependent variable showed the same pattern, $F(3, 92) = 2.59$, $p = .058$, $\eta_p^2 = .08$. The average time participants worked on the task per condition was 269 seconds in the Benign Envy condition, 213 seconds in the Admiration condition, 237 in the Malicious Envy condition, and 235 in the Control condition.

condition persisted on the task more than those in the Admiration condition, Breslow $\chi^2(df = 1) = 6.28$, $p = .012$, the Malicious Envy condition, Breslow $\chi^2(df = 1) = 3.59$, $p = .058$, and the Control condition, Breslow $\chi^2(df = 1) = 3.32$, $p = .068$. These latter three conditions did not differ from each other, all Breslow $\chi^2(df = 1) \leq 0.90$, $p \geq .343$.

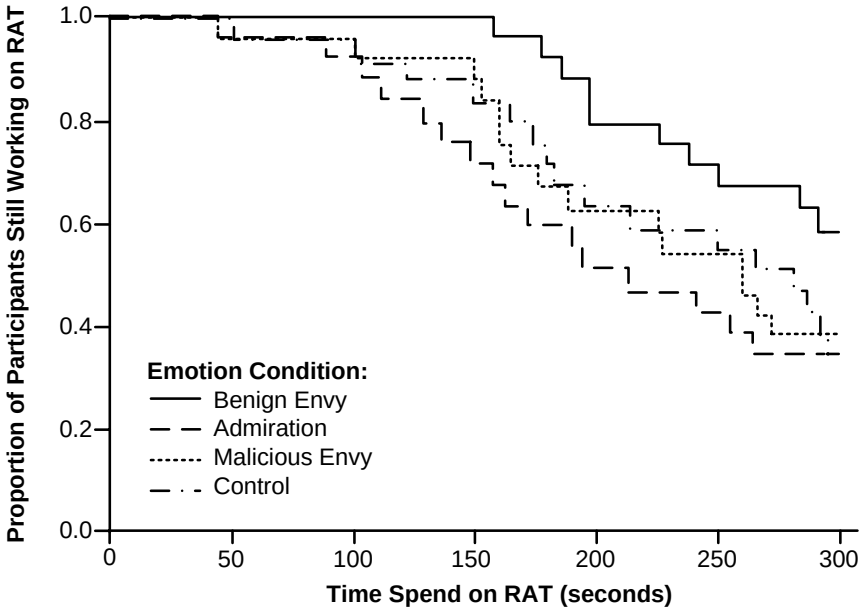

Figure 4.3 Time spent on RAT per participant per condition in Study 4.3

Note. Steps from left to right in the curves indicate participants quitting the RAT.

The time that participants spent on the RAT ($M = 238$ seconds, 39 of the 96 participants used the full five minutes) was positively related to the number of correct answers on the RAT, $\beta = .20$, $t(95) = 1.98$, $p = .051$. This shows that spending more time on the task had a positive effect on performance. Yet, even after controlling for the longer time spent working on the RAT, benignly envious participants still performed better than the participants in the other conditions, $F(3, 96) = 2.74$, $p = .048$, $\eta_p^2 = .08$, with all LSD post hoc tests having p's $\leq .046$. Why this is the case is unclear,

perhaps the benignly envious were also more focused on the task and freed up more cognitive resources, but it certainly is an intriguing finding.

This study also provides some insight into a possible reason why people believe that admiration is a motivating factor. For example, Smith (2004) reasoned that if envy "transmutes" or develops into admiration, the envious will become motivated to attain more for oneself. Participants in the Benign Envy condition also indicated to have experienced quite some admiration next to benign envy, perhaps because it is a more socially desirable answer (Parrott, 1991). However, a closer look at the effects of the self-reported emotions on performance via regression analysis revealed that admiration was unrelated to performance, $\beta = .01$, $t(95) = 0.10$, $p = .921$, while benign envy was related to it, $\beta = .23$, $t(95) = 2.13$, $p = .036$. So, although the participants in the Benign Envy condition indicated to experience quite some admiration, it was only their reported experience of benign envy that was associated with their performance, and this is crucial. Note that the intensity of the experienced malicious envy was also unrelated to performance, $\beta = .12$, $t(95) = 1.15$, $p = .253$, again showing that is not any pain following upward comparisons that stimulates performance.

Unhappy self-assertion versus happy self-surrender

So far benign envy was found to increase performance, while malicious envy and admiration were not. The goal of the next studies was to examine more closely the relationship between benign envy and admiration. With "happy self-surrender," Kierkegaard (1849/2008) suggested that admiration arises when people give in to the sense that they will not be able to attain the coveted object. In fact, he states (p. 71) that "an admirer who feels that he cannot be happy by surrendering himself elects to become envious of that which he admires." Whereas Kierkegaard describes it as a choice to *become* envious (if one can not surrender), I believe it is more likely that a person in that situation *remains* envious. As explained below, there is reason to believe that the initial reaction to an upward social comparison is envy, but that in situations where envy would be ineffective some cognitive effort is taken to transform the experience into admiration. Let me explain why.

Envy is a counterfactual emotion that arises from feelings like "it could have been me" (Elster, 1991; Teigen, 1997; Zeelenberg & Pieters, 2004). From a functional perspective, it is ineffective to be benignly envious of someone if the coveted good can not be obtained: an envious person would feel frustrated, but would not be able to fulfill the associated action tendency to improve one's situation. Without an opportunity for self-assertion, only discontent with one's own situation would remain, which is clearly an undesirable state. Evaluating whether the situation can be improved for oneself is considered a secondary appraisal, an appraisal of how one can cope with the situation at hand, which only follows after a primary appraisal (how does the situation affect me?) is made (Frijda, 1986; Lazarus, 1991). When one is outperformed and the situation is perceived to be unchangeable, benign envy is an ineffective emotion to experience, and experiencing admiration is expected to be more likely. Earlier research found that attainability of the superior position of the upward comparison target matters for resulting self-perceptions (Lockwood & Kunda, 1997, 1999). Note that it is not the question whether the exact position of the superior target is attainable or not, but rather how people appraise whether the situation at hand provides an opportunity to perform better. The idea that the secondary appraisal of control potential (can I improve my situation?) influences which emotion is experienced following an upward social comparison is examined in Studies 4.4 and 4.5.

Study 4.4

Study 4.4 used a manipulation that influenced whether people thought good achievements are relatively easy or difficult to attain. From a functional account of emotions, it seems unlikely that a person will experience benign envy if the situation is very difficult to improve. After all, the typical action tendency to try to perform better is unlikely to be effective, and the frustrating feeling would therefore remain. Thus, it was predicted that if people think change is possible they will experience benign envy after an upward social comparison (with a subsequent increase in motivation and performance). However, if change is difficult, admiration is more likely, and no motivation for self-improvement is expected.

Method

Thirty-four participants were either primed with the idea that changing one's behavior is easy (High Control Potential, n = 17) or that change is difficult (Low Control Potential, n = 17). The prime was that of Poon and Koehler (2006, Experiment 2), who used it to activate an incremental-framework of personality versus an entity-framework of personality (traits do not change over time, see also Dweck, 1999). The prime was disguised as a "study of reading comprehension and explanation". The prime in the Low Control Potential condition detailed the life and achievements of a (fictitious) great scientist on two pages, suggesting that he had always been on a path to becoming a scientist (the prototypical introverted student, born in a family of eminent scientists, etc.). In the High Control Potential condition the many changes in the scientists life were highlighted to suggest temporal changes in traits.

Next, participants read the newspaper article on Hans de Groot, the superior student who did well in the "national student competition" (see Study 4.3). They were then asked to indicate how much benign envy, malicious envy, or admiration they felt towards the superior student (1 = not at all; 7 = very much so). These questions were presented in a random order. After this, an ostensibly unrelated study started that measured their motivation to perform, by assessing how much time they were planning to spend extra on their study in the upcoming semester (as in Study 4.1).

Results

The results are presented in Table 4.3. Participants primed with the idea that changing one's behavior is easy, felt more benign envy towards the superior student than participants primed with the idea that change is difficult. For admiration, the opposite pattern existed; admiration was (marginally) stronger if changing one's behavior is thought to be difficult. Malicious envy did not differ between conditions. Participants planned to increase the number of hours they would spend on their study more in the High Control Potential condition than in the Low Control Potential condition. The participants in the High Control Potential condition planned to spend more hours on their study than they had in the previous semester,

as their planned increase differed from 0, $t(16) = 3.69$, $p = .002$, $d = 1.85$, while this did not differ from 0 in the Low Control Potential condition, $t(16) = 0.17$, $p = .886$, $d = 0.09$. Most importantly, if the emotions were added as covariates to the analysis on the effect of the primes on performance, the effect of prime disappeared, $F(1, 29) = 1.20$, $p = .283$, $\eta_p^2 = .04$, and only benign envy was related to performance, $F(1, 29) = 5.76$, $p = .023$, $\eta_p^2 = .17$, while the other emotions were not, F's$(1, 29) \leq 1.48$, p's $\geq .234$, $\eta_p^2 \leq .05$.

Table 4.3. Emotions experienced toward superior student per condition in Study 4.4

	Dependent Variables							
Control	Benign Envy		Malicious Envy		Admiration		Change in Study Hours	
Potential	M	(SD)	M	(SD)	M	(SD)	M	(SD)
Low	3.47	(1.51)	2.65	(1.41)	5.29	(1.11)	+0.41	(9.93)
High	4.71	(1.49)	2.65	(1.37)	4.53	(1.33)	+7.06	(9.46)
Statistics ($df = 32$)	$t = 2.41$, $p = .022$, $d = 0.85$		$t = 0.00$, $p = .999$, $d = 0.00$		$t = 1.83$, $p = .077$, $d = 0.65$		$t = 2.16$, $p = .038$, $d = 0.76$	

Note. Emotions were measured on 7-point scales, from 1 (not at all) to 7 (very much so). Change in Study Hours was the number of hours participants indicated to spend more or less on their study in the upcoming semester compared to the previous one.

Discussion

The results of Study 4.4 show that people who think that it is relatively easy to change behavior, experience more benign envy than admiration after being confronted with a superior other student. If changing behavior is relatively difficult, they feel more admiration and as a result do not become motivated to study harder. The general idea is that admiration is a "surrendering" response, and that the initial experience of benign envy transmutes into admiration when improvement is thought to be difficult. Where Study 4.4 demonstrated that admiration is indeed likely if the situation is difficult to improve, Study 4.5 was designed to test whether it is indeed a secondary appraisal and thus a "surrendering" response.

Study 4.5

Here the idea is tested that envy is the "default" response to upward social comparison and that it may transform into admiration ("happy self-

surrender") when success is appraised to be too difficult to attain. Given that the appraisal of control potential is a secondary appraisal, some cognitive resources are necessary to make it (Lazarus, 1991; Scherer, 2001). Therefore, if cognitive resources are lacking, for example due to a cognitive load manipulation, the initial envy can not be transformed into admiration and the envious experience should remain, even if the coveted object appears unattainable. This is what was tested in Study 4.5.

Method

Participants and design. One hundred fourteen participants took part in a series of studies of which the current study was part. The study had a 3 (Prime: High Control Potential vs Low Control Potential vs Control) × 2 (Cognitive Load: No Load vs Load) design.

Procedure. Participants first took part on a "Neo-Intelligence Measure" that ostensibly measured the personality variable "implicit intelligence". It consisted of a number of analytical items like guessing the number of dots on a screen, or indicating which colored box is the most prototypical example for a given color name.

Next, they were primed with the idea that changing one's behavior is relatively easy (High Control Potential), that such change is difficult (Low Control Potential), or a neutral prime (Control). The primes were the ones used in Study 4.4, and in the control condition a neutral story on trees was used. After the prime, the cognitive load manipulation was presented. Participants were asked to remember either an easy pattern of 13 dots in a 5×5 grid (No Load) or a difficult pattern (Load).

Directly after they memorized this pattern and were asked to keep it active in their mind, the participants received (fake) feedback on their score on the Neo-Intelligence Measure. All participants learned that they had gotten an average score on the test. To gain a better indication of their score, they also saw the score of another (randomly selected) participant who was present at that time. In the High Control Potential and Low Control Potential conditions, the other person had scored extremely well. For half the participants in the Control condition this other participant had an average score, similar to the participant. For the other half of the participants in the

Control condition no other score was made known (to assess whether it would matter if nobody else knew that the participant only had an average performance). There was no difference between these two groups (F's < 1), so they were combined into one control condition. After the participants received their score, they indicated where the dots had been presented on the screen to end the cognitive load manipulation. Finally, the RAT was again used to assess subsequent task performance. There were 20 participants in both the Load and No Load Control conditions, 19 in the High Control Potential and Low Control Potential No Load conditions, and 18 in the High Control Potential and Low Control Potential Load conditions.

Results

The main analysis was a 3 (High Control Potential vs Low Control Potential vs Control) × 2 (No Load vs Load) ANOVA with the score on the RAT as the dependent variable. Figure 4.4 shows the results. There was a main effect of the Prime, $F(2, 108) = 7.73$, $p < .001$, $\eta_p^2 = .13$. Like in Study 4.4, the performance on the RAT in the High Control Potential condition ($M = 11.38$) was higher than in the Low Control Potential ($M = 10.46$) and the Control conditions ($M = 9.62$), LSD post hoc tests p's ≤ .045. These latter two conditions differed marginally significantly as well, $p = .063$.

Planned comparisons were used to examine the specific hypotheses. First of all, it was predicted and found that the Load manipulation did not influence the performance on the RAT in the two Control conditions, $M_{\text{No Load}} = 9.90$ versus $M_{\text{Load}} = 9.35$, $F(1, 108) = 0.80$, $p = .372$, $\eta_p^2 = .01$. The significant main effect already showed that participants in the High Control Potential conditions performed better than those in the Control conditions, which suggested that being outperformed led to a higher performance when one believes that the changing one's behavior is relatively easy. As predicted, also within the High Control Potential conditions no effect of load existed, $M_{\text{No Load}} = 11.58$ versus $M_{\text{Load}} = 11.17$, $F(1, 108) = 0.42$, $p = .520$, $\eta_p^2 = .00$. So, regardless of whether the score of the superior other was made known under load or not, participants performed equally well when they thought that changing one's behavior was relatively easy.

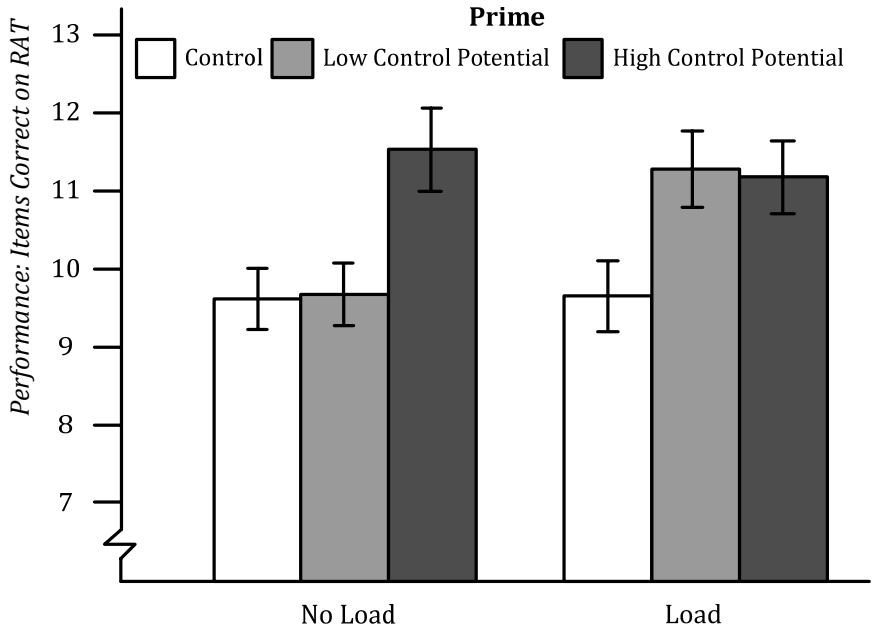

Figure 4.4 Performance on the RAT per condition in Study 4.5

Note. Error bars represent ±1 standard error of the mean.

The comparisons that are of key interest here involve the Low Control Potential conditions. It was predicted that under normal circumstances (without load), the "surrendering" admiration response was expected to be found when achievements are thought to be difficult to attain. Indeed, without cognitive load the performance on the RAT (M = 9.68) did not differ from the two Control conditions, F's(1, 108) ≤ 0.29, p's ≥ .592, η_p^2 = .00. So, when participants were primed with the idea that changing one's behavior is rather difficult, being exposed to another student who is much more intelligent does not increase performance, which is the typical admiration response. However, and crucially, when the score of the superior other student was presented under cognitive load, the subsequent performance of participants increased (M = 11.28) compared to when it was made known without the cognitive load, F(1, 108) = 6.23, p = .014, η_p^2 = .06. This increased performance was similar to the improved performance found in

the High Control Potential conditions, both *F*'s(1, 108) ≤ 0.22, *p*'s ≥ .638, η_p^2 = .00. Thus, participants who thought it was difficult to change their behavior performed better when the superior other student was presented under cognitive load, showing the typical response of benign envy.

Discussion

When people make an upward comparison and think that it is relatively easy to change one's behavior, they show the typical benign envy response (a better performance). When people think changing one's behavior is rather difficult, they show the admiration response; they "surrender" and do not improve their performance. When the upward comparison was made under cognitive load, however, participants performed better (i.e., the benign envy response) regardless of whether they thought changing one's behavior was easy or difficult. This is consistent with the reasoning that the initial reaction to an upward comparison is one of envy, and that some additional cognitive effort is needed to transmute thise feeling of envy into admiration.

General discussion

A series of five studies supported Kierkegaard's original hypothesis that envy motivates while admiration equals admitting defeat. Participants experiencing benign envy became motivated to work harder and actually performed better than those experiencing admiration or malicious envy. Study 4.1 showed that experiencing benign envy after an upward comparison was related to the motivation to study more in the upcoming semester, while admiration and malicious envy were not. Study 4.2 revealed that participants performed better on the Remote Associates Task (that measures intelligence/creativity) after they recalled being benignly envious, than after they recalled admiring someone, being maliciously envious, or those in a neutral control condition. In Study 4.3 participants read a story about a superior student and were asked to imagine how they would respond if they were benignly envious to him, admired him, or were maliciously envious toward him. Again, the participants who were benignly

envious performed better on the RAT and worked longer on it than the other participants did.

Next, it was investigated what happened if a person could be benignly envious, but self-improvement was thought to be difficult. If someone would feel the frustrating experience of benign envy, but could not resolve this because improvement was too difficult, the emotion could not be resolved and the frustration would linger. It was hypothesized that after an upward comparison a person tends to generally become envious, and that after this initial experience a (quick) secondary appraisal is made regarding whether self-improvement is possible. If it is, benign envy remains, if it is not, the benign envy will transmute into admiration. Study 4.4 indeed found that when participants thought changing one's behavior is relatively easy, benign envy was stronger and students planned to study more following an upward social comparison. When participants thought changing one's behavior was difficult, admiration was the stronger response and participants did not become motivated to do better. Study 4.5 replicated this effect, and consistent with the idea that admiration is a surrendering response, under cognitive load people still showed the typical envious response and performed better, independent of the perceived attainability. This suggests that envy was, at least in the present study, the initial reaction to an upward social comparison and that some cognitive resources are necessary to transform that experience into the pleasant feeling of admiration.

Note that I do not argue that this is the only route to admiration, because it may be felt in many other circumstances. First of all, admiration often arises for virtuous and moral acts (Algoe & Haidt, 2009; Immordino-Yang, McColl, Damasio, & Damasio, 2009), for which envy is unlikely. Furthermore, a person who witnesses an outstanding performance of another person in a domain that is not important for the person him- or herself (e.g., a scientist who sees a swimmer win an Olympic gold medal) is also likely to admire this person. An outstanding performance in a domain unimportant to oneself likely leads to admiration directly.

The current results help to understand how social comparisons affect behavior. Upward social comparisons have been found to influence people in various ways, and can both make people feel worse and better about

themselves (Collins, 1996). For example, some art students enrolled in a 6-week summer school with other highly skilled students felt threatened and inferior, while other students felt inspired in this situation (Burleson, Leach, & Harrington, 2005). The effects of upward comparisons on subsequent behavior are also mixed: they can stimulate people to do better (Blanton, Buunk, Gibbons, & Kuyper, 1999; Marx & Roman, 2002; Seta, 1982), but can also hurt subsequent performance (Dijksterhuis et al., 1998; Stapel & Suls, 2004). Johnson and Stapel (2007a) combined these earlier findings, and found that only when people felt threatened after an upward comparison they performed better. The findings in this chapter are consistent with this "no pain, no gain" principle, but go beyond it by revealing that it is not just any pain from upward comparisons that increases performance. Malicious envy also included negative feelings about oneself but it did not increase performance. Rather, the specific sting of benign envy appears to be the impetus to improving one's own position after an upward social comparison.

An important aspect of the current findings is that if achievements are thought to be difficult to attain, performance did not increase after an upward comparison. Lockwood and Kunda (1997) studied related phenomena, and found that first year students rated themselves better on attributes such as being bright and skillful when they were confronted with a superior fourth year student, while fourth year students who were confronted with this outstanding other rated themselves as worse. These findings are generally interpreted as showing that attainability of the accomplishment matters; if the superior position is thought to be attainable, people become inspired. However, as discussed before, inspiration and actual performance seem to be different constructs; admiration contains inspiration (Algoe & Haidt, 2009), but the current studies found that admiration does not stimulate direct performance. Although the findings of Lockwood and Kunda are important, they did not investigate how these experiences influenced subsequent performance. Based on their research and the current findings, I would actually predict that only the 4th year students would perform better on a subsequent task. After all, a self-threat is necessary for performance to increase (Johnson & Stapel, 2007a), and

being more similar to the superior target makes it more likely that (benign) envy is experienced (Salovey & Rodin, 1984; Schaubroeck & Lam, 2004).

Although these predictions differ from those Lockwood and Kunda (1997) made, note that their general idea is practically the same as the one tested in this chapter: when confronted with an upward comparison, perceptions that improvement is difficult to attain do not lead to a motivation to perform. The difference lies in the idea that even though the exact position of the superstar position might appear unattainable, it is argued here that if the situation allows for improvement benign envy (and subsequent better performance) are still possible. It is thus not the attainability of the position of the outstanding other that determines motivation, but rather whether the person who compares upward perceives the subsequent situation to allow for self-improvement. Perceived control potential therefore remains an important moderator explaining when (and why) upward comparisons stimulate performance.

Linking the current work to that on social comparisons also helps to make predictions on how people can cope with being benignly envious. As discussed before, the typical action tendency of benign envy is to try harder, which helps to relieve oneself from the frustrating experience of envy. Johnson and Stapel (2007a) found that affirming oneself (by recalling some positive aspects of oneself) removed the self-threat after an upward comparison. Lockwood and Kunda (1999) found that upward comparison did not affect participants when they had previously imagined their own best performance. Recalling one's own positive aspects is thus likely to help to alleviate (or prevent) feelings of envy after being confronted with a superior target. As Johnson and Stapel also found, this does come at the cost of loosing the extra motivation to perform better.

The current findings may also shed new light on how role models can influence people. Because benign envy increases performance and admiration does not, role models that trigger benign envy are expected to have a greater impact on performance than those that elicit admiration. Consistent with this idea is the finding that role models increase performance more for people with a high tendency to compare themselves with others (Buunk, Peiro, & Griffioen, 2007). This dispositional tendency to

compare oneself with others, the social comparison orientation (Gibbons & Buunk, 1999), is related to the dispositional tendency to experience envy (the DES; Smith et al., 1999; see Zeelenberg & Pieters, 2007). Based on these findings it seems safe to conclude that those who tend to compare themselves to others and thus experience envy regularly, are more likely to become motivated after being exposed to an outstanding role model.

Another example in the domain of role models in which envy might help making predictions, is found in research on the effect that female role models have on other females' math test performance (Marx & Roman, 2002). Females tend to perform worse than males on a math test when a male experimenter is present (a result from stereotype threat, see Steele, 1997). However, when a female experimenter was present who was highly competent in math, performance of the females increased. Marx and Roman attribute this to a "buffering effect" of the role model, but an alternative explanation might be that the females are benignly envious toward the superior other. As discussed before, superior similar people in important domains elicit most envy. The female participants in this study were selected for their interest in math, and for these females a high achieving role model is likely to elicit benign envy, which could have caused the better performance for them[7]. If benign envy played a role in causing the results in this study, a similar pattern is expected for the male participants; the males are expected to be more benignly envious when a good-performing male was present than when a good-performing female was present. The data suggests that this might have been the case, and although the difference was not significant, this could be caused by the small number of participants as a medium sized effect existed. Investigating whether role models indeed elicit benign envy might help to understand how outstanding others motivate persons.

Although the current findings revealed that admiration does not improve performance, I do not wish to claim that admiration lacks positive consequences overall. According to the Broaden-and-Build model (Fredrickson, 1998), positive emotions broaden one's repertoire for further

[7] This does not explain why a stereotype threat occurs, only that the "buffering effect" is potentially caused by benign envy.

actions. Positive emotions, such as admiration, generally signal that things are going well, which can lead to creative exploratory behavior and strengthen the bonds between people. The function of admiration could therefore for example be to inspire novel ways to reach one's goals, to focus on new domains of performance if one is severely outclassed in one, or to enhance the relationship with the admired person.

To conclude, the research presented in this chapter finds that only benign envy stimulates performance following an upward comparison. Admiration feels good but does not lead to a motivation to improve oneself. Kierkegaard (1849/2008) called admiration *happy self-surrender*, a feeling that the other is so good at something that one can only look with astonishment at how good the other is. Benign envy on the other hand, feels frustrating but does lead to a motivation to improve. Kierkegaard called this *unhappy self-assertion*, a negative feeling about oneself that arises from a comparison to the outstanding other, but that does elevate effort and performance. Is benign envy therefore better than admiration? It might be, but although self-assertion increases performance, self-surrender feels better. So, the answer to the question whether to admire or to be envious depends on what matters most: feeling or performing better.

5

The envy premium: How possession by others increases product value

The results of three experiments show that consumers are willing to pay more for products that elicit envy in them. This envy premium is only found when consumers experience benign envy, which arises when the superior position of the other is deserved. When consumers experience malicious envy, which arises when the superior position of the other is undeserved, they are were willing to pay more for a related product that is superior on a different attribute. In this way, malicious envy promotes consumers to move away from others, rather than to keep up with them.

This chapter is based on: Van de Ven, N., Zeelenberg, M., & Pieters, R. (2009b). The envy premium: How envy increases product value. *Manuscript under review.*

Chapter 5.

A colleague had been pondering about buying a particular type of car for quite some years. Because the price was $5000 higher than what she was willing to pay, she kept deferring the choice. Yet, when a friend bought that particular type of car she wanted, she bought one too the next day. The fact that the car was too expensive a few days earlier completely lost its meaning when envy kicked in.

Consumers often want what other consumers have. Economists have described this social influence under various names, such as bandwagon effects (people want the same things as they think that other people want, Van Herpen, Pieters, and Zeelenberg, 2009) and keeping-up-with-the-Joneses (people want to keep up with what their peers have, Frank, 1999). Such terms reflect that consumers' preferences depend on what other people have or want, but not the conditions upon which this dependency is contingent. Why and how do other people have such an influence? Although a number of motivational forces might be causing phenomena such as keeping-up-with-the-Joneses, (Csikszentmihalyi, 2000), I think that a primary motivational force to keep up with others is the emotion of envy.

Envy is a negatively valenced emotion that generally arises when one compares unfavorably to another person in an important domain, and it leads to a desire to reduce the gap between oneself and the superior other (Miceli & Castelfranchi, 2007; Smith & Kim, 2007). Envy research has typically focused on the potential destructive consequences, and for example found that envy can hinder cooperation (Parks et al., 2002) or negatively influence group performance (Duffy & Shaw, 2000; Vecchio, 2005). This focus on the destructive consequences of envy seems at odds with a common idea in economics that envy stimulates the economy, by increased purchase and spending levels (Corneo & Jeanne, 1997, 2001a, 2001b). In the current chapter I shift the focus from these frequently documented destructive consequences of envy that are aimed at pulling down the envied person, to the potentially more constructive consequences of envy that are aimed at improving the position of the envious person. Let me first discuss relevant envy theory, and next propose a solution for the paradox that envy is considered highly destructive and at the same time constructive for economic growth.

Envy theory

Envy arises from a comparison to another person who is superior in an important domain (Bers & Rodin, 1984). The more similar the other is, the more intense the envy will be (Elster, 1991; Salovey & Rodin, 1984). A commonly held idea is that the main motivation resulting from envy is destructive (Miceli & Castelfranchi, 2007; Smith & Kim, 2007). Thus, most of the major religions explicitly condemn envy: the Talmud describes sages who apparently prayed "let me not be envious of others, and let others not be envious of me." Envy is forbidden in the Ten Commandments in the Judeo-Christian tradition, one of the seven deadly sins in Catholic philosophy, and Muhammed is quoted (in Abu Daud) as having stated "Keep yourselves far from envy, because it eats up and takes away good actions, like the fire that eats up and burns wood." The conviction that envy is hostile and malicious is thus a recurring theme in society, but also in scientific literature as discussed below.

The harmfulness of envy, for both the envious and the envied is shown in research in different fields of study (Beckman et al., 2002; Duffy & Shaw, 2000; Hoelzl & Loewenstein, 2005; Parks et al., 2002; Vecchio, 2005; Zizzo, 2002; Zizzo & Oswald, 2001). Parks et al., for example, found that participants who were envious of another behaved more selfishly toward an envied person in a social dilemma. Schoeck (1969) argued that the fear of being envied by others prevents people from striving for excellence, thereby hindering the progress of societies as a whole. He considered envy to be "the consuming desire that no one should have anything, the destruction of pleasure in and for others, without deriving any sort of advantage from this" (p. 140). All in all, these theories and empirical findings paint a pretty grim picture of envy and its destructive associations.

Interestingly, envy may not be that grim at all, and can motivate economic strivings and propel people to work harder in order to earn the coveted goods owned by others (Epstein, 2003; Foster, 1972; Kant, 1780/1997; Neu, 1980). The advertising agency Young and Rubicam (2006) explicitly capitalizes on this emulative side of envy and sells its services by claiming to be able to boost sales by increasing the "envy potential" of a product. Indeed, Epstein describes this type of envy as the motor of

capitalism. More recently, Belk (2008, p. 213) portrayed consumer envy as a mildly positive form of envy that "more likely leads to emulation than immolation." He sees consumer envy as a constructive desire to acquire the coveted good and contrasts it from "envy proper", the destructive type of envy aimed at degrading the other person.

The constructive or productive character of envy has only recently received empirical attention, but it became clear that envy can also induce a desire for progress. Cohen-Charash (in press) found that although the experience of envy in the workplace had negative consequences, it also led to a desire to improve one's own position. Chapter 2 found empirical support for the distinction between two types of envy in the Netherlands, the U.S., and Spain. These envy types, benign and malicious envy, could (despite their communalities) clearly be distinguished on the basis of their experiential content (the feelings, thoughts, action tendencies, the actions, and the motivations that comprise the experience, Roseman et al., 1994). The first type, malicious envy, is the typical destructive type of envy: People feel that it is undeserved that the other has the advantage (see Chapter 3), and try to level this difference by pulling down the other. The second type, benign envy, is a more positive form: People still feel frustrated, but do not feel that the disadvantage is undeserved, and they try to level the difference by moving up themselves. Chapter 4 indeed found that benignly envious people performed better on an intelligence task compared to people who were maliciously envious.

I build on these findings as it appears likely that the distinction between benign and malicious envy can provide insight into the various ways in which envy may influence the behavior of consumers. The solution to the envy puzzle, that it leads to destructive behavior but can stimulate economic growth, lies in the phenomenology of the distinct envy types. Because benign envy is associated with a motivation to attain more for oneself, it was predicted that consumers who are benignly envious of another consumer are willing to pay more for the envy eliciting product. Because malicious envy does not involve such a motivation to improve one's own situation, it was predicted that experiencing malicious envy would not lead to a greater desire for that product.

The envy premium

If benign envy activates a general tendency to move oneself up, it is likely that if a person is benignly envious of someone in possession of an attractive product, the envious consumer would be willing to pay more for that product. By doing so, the envious consumer would resolve the experience of envy, as the frustrating experience goes away when he or she moves up to the similar level as the envied person by buying the product. I call this increased willingness to pay the "envy premium"[1]. Thus, if one envies someone who owns a desirable product and this advantage is seen to be deserved, benign envy is likely to result. This, in turn is expected to make people willing to pay more for that product. In the case of the opening example of the colleague who bought a car when a friend bought one, it seems likely that she was benignly envious, which made her overcome her initial reservations regarding the price of the car.

If people are indeed willing to pay more when they are benignly envious, they are also likely to buy more. The more other people own, the more envious other people might become and therefore buy more as well. Such a continuing cycle, with envy as the "emotional multiplier" could indeed increase economic growth. Although such a cycle of increasing consumption certainly has negative effects as well (De Botton, 2004; Frank, 1999; Van Boven & Gilovich, 2003), understanding an emotion that possibly affects economic growth is of course of great importance.

Summarizing the idea, I predicted that benign envy increases the desire for envied products. Benign envy is associated with action tendencies of moving-up oneself, aimed at reducing the gap between oneself and the envied other. Via an increased motivation for obtaining the coveted good, this reduction of the gap with the other can be achieved. This tendency is measured by asking participants how much they are willing to pay (WTP) for the product, and it is expected that benign envy results in a higher WTP. By comparing this WTP to the WTP in a control condition, the "envy premium" can be estimated. Such an envy premium is predicted to exist for

[1] There are more emotions that have such an influence on the WTP for a product. For example, people are willing to forego a direct material gain if this helps them to prevent the possibility of future regret (Bell, 1983; Van de Ven & Zeelenberg, 2009), and people who are curious are willing to pay a premium to satisfy the curiosity (Van de Ven, Zeelenberg, & Van Dijk, 2005).

benign envy, but not for malicious envy. Malicious envy is associated with a desire to pull-down the other person and is therefore not expected to generalize to an increased WTP for the envy eliciting product. If anything, the opposite is expected, because malicious envy could lead to a desire to distance oneself from the other. I return to the effects of malicious envy in the final experiment, but first focus on revealing the envy premium for benign envy. The following hypothesis is tested:

H1: Consumers who are benignly envious of someone who owns an attractive product are willing to pay a premium for that product, compared to when they are maliciously envious of the person, or when they are not envious.

This hypothesis was tested in Studies 5.1 to 5.3. Study 5.1 asked participants to imagine being benignly envious toward someone with an attractive product, being maliciously envious toward that person, or to imagine that they really liked a product that someone owned (as a control condition). In Studies 5.2 and 5.3 a manipulation was used that was designed to actually induce these emotions in the participants, via a video of a fellow student who talked about an attractive product that he owned. More specifically, it was manipulated whether it appeared to be deserved (benign envy) or undeserved (malicious envy) that the other person owned the product. The perceived value of a product should not be influenced by whether it was deserved or not that someone else obtained it, but I expected that the value people attribute to the product would be influenced by it.

The iPhone was used as the envy eliciting product in these studies. It was officially not yet available at the time the data was collected, but much information had already excited the market and some had already imported one. Because conspicuous consumption is more likely for products that are exclusive and visible (Bearden & Etzel, 1982; Solomon, 1983) the iPhone seemed appropriate.

Study 5.1

In Study 5.1 the emotions were induced by asking participants to imagine being in a situation in which a fellow student owned an iPhone. Focusing on

fellow students as the upward comparison target helped to create a sense of similarity to the target, as greater similarity generally tends to lead to more envy (Salovey & Rodin, 1984). Earlier research had found that when people recall an experience in which another person had something more attractive than they had themselves, self-reported envy and the desire for that product were related (Ackerman, MacInnis, & Folkes, 2000). However, that research did not determine the causality of this relationship; are envied goods desired more, or are desired goods envied more? Both seem plausible given that envy is more intense if the object is important (Bers & Rodin, 1984; Salovey & Rodin, 1985; Tesser & Smith, 1980). In the current studies I directly manipulated the emotions, to investigate whether envy indeed increases the desire for a product.

Method

Participants and design. Ninety participants (26 females, M_{age} = 20.47 years, SD = 2.08) took part in this experiment. They were randomly assigned to a Benign Envy condition, a Malicious Envy condition, or a Control condition, with 30 participants per condition.

Procedure. Participants received a short story that they were asked to imagine, with a picture of the iPhone at the top showing some of its features (color screen, internet, GPS, MP3 player, etc.). The participants were asked to imagine being in a situation in which they were working on a study-related task with some fellow students. One of the persons in the group owned an iPhone and was showing the possibilities of the phone to the other group members. The participants were asked to imagine feeling jealous and some admiration for the fellow student (Benign Envy condition), to imagine feeling jealous and begrudging (the Malicious Envy condition), or just to imagine that they really liked the product (Control condition). The manipulation of benign and malicious envy was based on differences in the experiential content of these envy types as found in Chapter 2. In line with previous research (Foster, 1972; Neu, 1980; Parrott & Smith, 1993; Salovey & Rodin, 1989; Schoeck, 1969; Smith et al., 1988) participants were asked to imagine being somewhat jealous, as the word jealousy is colloquially used to indicate envy.

After reading the scenario, participants indicated how much they liked to have the iPhone and how much effort they were willing to spend to attain one (combined into an "attractive to self"-measure, $r(90) = .60$, $p < .001$). It was expected that those in the Benign Envy condition would find the product more attractive than those in the Control and the Malicious Envy conditions. To explore whether this expected increase in liking the product also transfers to perceiving how other people see the product, participants also indicated how much they thought others would like to have the iPhone and how much effort they thought another person would be willing to spend to attain one (combined into an "attractive to others"-measure, $r(90) = .72$, $p < .001$). This allowed the exploration of whether the envious response would signal to the participants that the product is desirable to anyone (if the participants in the Benign Envy condition would also think that others would like it more), or just mainly to themselves (if the participants in the Benign Envy condition do not think it is more attractive to others). Finally, participants indicated the maximum price they were willing to pay to obtain an iPhone, which was expected to be highest in the Benign Envy condition.

Results and discussion

The means of how attractive participants rated the iPhone are presented in Table 5.1. Participants in the Benign Envy condition found the product more attractive than those in the Control and Malicious Envy condition. Furthermore, the left panel of Figure 5.1 shows that participants in the Benign Envy condition indicated that they would be willing to pay more for an iPhone than the participants in both the other conditions, $F(2, 87) = 4.47$, $p = .014$, $\eta_p^2 = .09$. Compared to the Control condition, the benignly envious participants were willing to pay €60 more for an iPhone, an envy premium of 48%. These findings support Hypothesis 1, showing that envy in its benign, but not in its malicious form, increases the perceived attractiveness of a product and the WTP for it.

Participants also indicated how much they thought that other people would like the iPhone. This allowed the exploration of whether envy would also lead to an idea that other people would like it more, or whether benign

Table 5.1. Ratings on how attractive the iPhone is for oneself and how attractive it is expected to be for others per emotion condition in Study 5.1

	Attractiveness Ratings for Self		Attractiveness Ratings for Others	
Condition	M	(SD)	M	(SD)
Control	4.28[a]	(2.22)	6.27	(1.39)
Malicious Envy	4.35[a]	(1.86)	6.23	(1.40)
Benign Envy	5.50[b]	(1.76)	6.07	(1.06)
	$F(2, 87) = 3.67$, $p = .030$, $\eta_p^2 = .08$		$F(2, 87) = 0.17$, $p = .843$, $\eta_p^2 = .00$	

Note. Means with a different superscript differ between conditions at $p \leq .025$, tested with LSD post hoc comparisons. Scales range from 0 (not attractive) to 9 (very attractive).

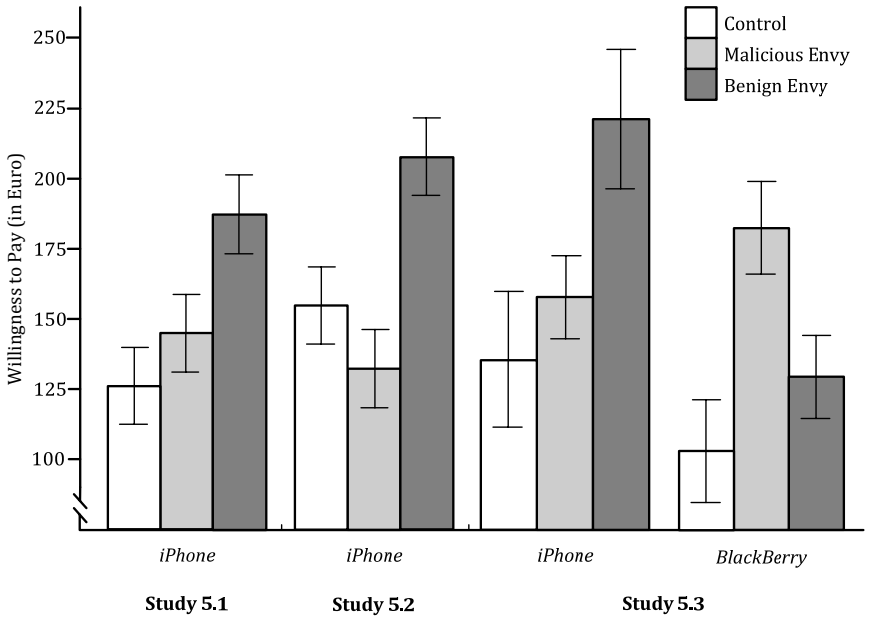

Figure 5.1 Willingness to pay for an iPhone per emotion condition in Studies 5.1, 5.2, and 5.3 and a BlackBerry in Study 5.3

Note. WTP for an iPhone was always highest in the Benign Envy condition, all LSD post hoc tests finding p's ≤ .048. WTP for the iPhone did not differ between the Control and Malicious Envy condition in any of the experiments, LSD post hoc tests finding p's ≥ .359. WTP for a BlackBerry was higher in the Malicious Envy condition than in the Control and Benign Envy condition, LSD post hoc tests finding p's ≤ .032. For the BlackBerry, the WTP did not differ between the Control and Benign Envy condition, $p = .278$. Error bars represent ±1 standard deviation of the mean in each condition.

envy only increased the desire for that product for oneself. As Table 5.1 shows, participants did not think others would find an iPhone more attractive when they were benignly envious. This suggests that being benignly envious signals to a person that something is desirable for oneself, but that people do realize that this is not necessarily the case for others.

Study 5.2

In the second experiment the emotions were actually elicited in a real situation, instead of via a scenario. To do so, a fellow student (a confederate) who was talking enthusiastically about his new iPhone was videotaped. Participants watched this video, presumably part of a study on consumer experiences with cell phones. In the Control condition participants saw a clip of 42 seconds of the fellow student responding to questions asked about the options of his iPhone. In the Benign and Malicious Envy conditions 15 seconds were added before the clip shown in the Control condition. In this added time, the fellow student responded to a question on how he had acquired his phone. A key difference in the eliciting situation for benign and malicious envy is the deservingness of the situation (see Chapter 3). If the advantage of the envied other is perceived to be deserved, benign envy is likely to result, while if the advantage is perceived not to be deserved malicious envy is more likely to result. In the Benign Envy condition the confederate in the video responded that he had worked hard to earn the money to buy the iPhone, making it rather deserved that he had obtained it. In the Malicious Envy condition, the fellow student replied that "this was one of those things my father usually buys for me", making it not so deserved. Participants in all the conditions learned that an iPhone typically sells for about 400 euro. Although the Control condition could potentially also elicit envy, it was expected that the envy would be particularly painful when the information regarding the acquisition of the phone was added, because the comparison to the other becomes more salient.

Method

Participants and design. Eighty-nine participants (47 females, M_{age} = 22 years, SD = 2.07) took part in a study on "consumer experiences with cell

phones." Participants were randomly assigned to a Benign Envy (n = 30), a Malicious Envy (n = 29) or a Control condition (n = 30).

Procedure. Participants were told that they would see a video of another student who would tell something about his new cell phone. They would then be asked a number of questions, after which they were told that they would be videotaped themselves while telling something about their own cell phone. This actually did not occur, because participants were debriefed after they had watched the video and had answered the questions.

In between a number of filler questions on the general functionality of cell phones, the dependent variable and manipulation check were placed. First participants indicated "the maximum amount of money they would be willing to pay for an iPhone." Next they indicated how deserved they felt it was that the videotaped student had the phone he had, on a scale of 1 (not at all) to 8 (very much so).

Results and discussion

There were clear differences on the manipulation check regarding deservingness, $F(2, 86) = 8.70$, $p < .001$, $\eta_p^2 = .17$. LSD post hoc tests showed that participants in the Benign Envy condition found it more deserved that the other had the iPhone (M = 6.83, SD = 1.76) than those in the Control condition (M = 5.77, SD = 1.81, p = .019) and the Malicious Envy condition (M = 4.97, SD = 1.59, p < .001). These latter two conditions differed marginally, p = .078.

The WTP for the iPhone per condition is presented in the second panel of Figure 5.1. Again, the predicted differences between the conditions emerged, $F(2, 86) = 4.65$, p = .012, η_p^2 = .10. In support of Hypothesis 1 and replicating Study 5.1, participants who were Benignly Envious were willing to pay more than those in the Control and Malicious Envy conditions. Compared to the Control condition, those in the Benign Envy condition were willing to pay €50 more for the iPhone, revealing an envy premium of 32%.

With a more direct manipulation of envy, it was again found that being benignly envious increased the desire for a product. Participants who saw someone with an attractive product and thought it was deserved that he had it (a situation that elicits benign envy) were willing to pay more for

the product than those who had found it not to be deserved (a situation that elicits malicious envy) or for whom no information was given on how it had been obtained (a control condition).

Study 5.3

This experiment again examined the influence of benign envy on the WTP for attractive products, but now also studied the consequences of malicious envy in greater detail. When a person is envious and it is undeserved that the envied person has an attractive product, the likely response is malicious envy. This type of envy triggers a motivation to degrade the other person (see Chapter 2; Smith et al., 1994; Zizzo & Oswald, 2001). I think that although the frustration that is part of malicious envy is attributed to the undeservingness of the other person having something desirable, the experience of envy does signal to the person experiencing it that the domain in which one is outperformed is important (Salovey & Rodin, 1984). Therefore, some action tendencies aimed at restoring this are likely. Where earlier research on (malicious) envy mainly focused on its destructive consequences, literature on social comparison processes provides an alternative likely reaction of maliciously envious consumers. In addition to, or instead of, pulling down the other, consumers may turn to *social differentiation* (Lemaine, 1974) after an experience of malicious envy.

Social differentiation occurs when people are outperformed in one domain, and then look for an alternative domain in which they might outperform the previously superior person. For example, hockey players at the bottom of their league knew that the other teams were better than them, but they also considered these other teams to play "dirty" (Lalonde, 1992). Comparing themselves on this domain of sportsmanship allowed them to feel better than the others, even though the other teams were higher ranked. Chapter 2 also found that people experiencing malicious envy indicated that they wanted to distance themselves from the envied person, which is consistent with the idea of social differentiation following malicious envy.

How would this social differentiation following malicious envy have an impact on consumer behavior? Consider someone who is maliciously envious of another person showing off an iPhone. A typical response could

be; "Yes, your iPhone looks pretty and is fun, but that is not what is important for a cell phone. A cell phone should be practical and reliable." At the same time, however, the experience of envy does suggest to the person that there is some frustration because the envied person has something that the envious lacks. The focus on this gap arising from an experience of malicious envy might not increase the desire for the envy-eliciting product, as benign envy does, but it might increase the desire for a similar but at the same time clearly different product. Being maliciously envious of the person with the iPhone might actually increase the interest for another cell phone, for example a phone that is evaluated as more practical and reliable such as a BlackBerry. Buying such a related but different product, would resolve the frustration of being inferior, by differentiating oneself from the envied consumer. A person who is benignly envious would not be willing to pay more for such another product, as the emotion signals that it mainly is the envied product that is so attractive. Because the action tendency is already aimed at getting the envied product for oneself, no need for differentiation exists. This led to the following hypothesis:

H2: Consumers who are maliciously envious of someone who owns an attractive product are not willing to pay more for that product, compared to a control group, but they are willing to pay more for a related, but clearly different product.

In Study 5.3 the same videos as in Study 5.2 were used to induce benign and malicious envy. After asking for the WTP for an iPhone, participants now also saw a picture and written information on a BlackBerry 8820. Both phones are smartphones with extensive features. The BlackBerry was presented as a similar option as the iPhone, but was also clearly different in a way (participants were told that it was aimed at a more business-oriented market than the iPhone was). I expected to replicate the earlier findings that being benignly envious toward someone with an iPhone would lead to a higher WTP for the iPhone, but not for the BlackBerry. However, it was also expected that participants who were maliciously envious toward the person with the iPhone would be willing to pay more for the BlackBerry, testing Hypothesis 2.

Method

Pretest. A pretest examined whether the BlackBerry was indeed viewed as a product that is more reliable and practical compared to the iPhone. Sixty-nine students rated the iPhone versus the BlackBerry on hedonic aspects ("Do you think the iPhone or the BlackBerry looks prettier?" and "Do you think the applications of the iPhone or the BlackBerry are more fun?") and on functional aspects ("Do you think the iPhone or the BlackBerry is more practical?" and "Do you think the iPhone or the BlackBerry is more reliable?") on a 7-point scale with both phones on each end (scored from -3 for the iPhone to +3 for the BlackBerry). The two hedonic aspects, $r(69) = .55$, $p < .001$, and the two functional aspects, $r(69) = .61$, $p < .001$, were combined into separate measures. The resulting hedonic and functional evaluations of the phones were unrelated to each other, $r(69) = -.12$, $p = .304$. Participants generally preferred the iPhone on the hedonic dimension ($M = -1.68$, $SD = 1.35$, which differs from the neutral midpoint of the scale, $t(68) = 10.36$, $p < .001$, $r^2 = .61$) and the BlackBerry on the functional dimension ($M = 0.74$, $SD = 1.65$, which also differs from the midpoint, $t(68) = 3.71$, $p < .001$, $r^2 = .17$).

Participants and design. Sixty-two participants (44 females, M_{age} = 22.37 years, SD = 2.62) took part in a study on "consumer experiences with cell phones". Participants were randomly assigned to a Benign Envy (n = 21), Malicious Envy ($n = 21$) or a Control condition ($n = 20$).

Procedure. The procedure was similar to that of Study 5.2. Participants first saw the videos, and immediately afterwards they indicated how much they were willing to pay to obtain an iPhone for themselves. Next, they saw a picture of the BlackBerry 8820 cell phone with the following description: "Another phone that currently sells well is the BlackBerry 8820. Just like the iPhone it has extended internet and multimedia abilities, but it is aimed at a somewhat more business oriented market." They then indicated their WTP for the BlackBerry.

After this, they answered two more questions regarding the video they had seen. First, they indicated whether they thought it was deserved that the other person had the iPhone, on a scale from 1 (very undeserved) to

7 (very deserved). Second, they indicated how jealous they were of the person on a scale ranging from 1 (not at all) to 7 (very much so).

Results and discussion

Table 5.2 shows the manipulation checks. The manipulation of envy was effective, as the participants in both envy conditions were more jealous than those in the Control condition. Furthermore, participants in the Benign Envy condition thought it more deserved that the other person had an iPhone than those in the Control condition, while those latter participants considered it more deserved than those in the Malicious Envy condition.

Table 5.2 Manipulation checks per condition of Study 5.3

	Jealous		Deservingness	
Condition	*M*	*(SD)*	*M*	*(SD)*
Control	1.65^{a}	(1.18)	4.90^{b}	(1.17)
Malicious Envy	3.10^{b}	(1.64)	3.76^{a}	(1.58)
Benign Envy	3.05^{b}	(1.50)	5.76^{c}	(1.26)
	$F(2, 59) = 6.45$, $p = .003$, $\eta_p^2 = .18$		$F(2, 59) = 11.61$, $p < .001$, $\eta_p^2 = .28$	

Note. Means with a different superscript differ between conditions with *p*'s ≤ .045, tested with LSD post hoc comparisons. Scales range from 1 (not at all) to 7 (very much so).

The WTP for the iPhone and BlackBerry per condition is presented in the third panel of Figure 5.1. For the iPhone, the predicted differences in WTP between the conditions were found again, $F(2, 59) = 4.40$, $p = .017$, $\eta_p^2 = .13$. Participants in the Benign Envy condition were willing to pay €86 more, an envy premium of 64%. This replicated the findings of Studies 5.1 and 5.2 that participants who were Benignly Envious were willing to pay more for an iPhone than those in the Control and Malicious Envy conditions. Second, and importantly, the hypothesized differences between conditions for the WTP for the BlackBerry also emerged, $F(2, 59) = 5.55$, $p = .006$, $\eta_p^2 = .16$. Participants in the Malicious Envy condition were willing to pay more for a BlackBerry than those in the Benign Envy and Control condition, supporting Hypothesis 2.

Overall, and as can be seen in Table 5.3, analyses found that jealousy ratings predicted both the WTP for an iPhone and the WTP for a BlackBerry

(the more envious participants were, the more they were willing to pay for those phones). However, closer inspection reveals strong support for the hypothesis that benign envy leads to a greater desire for the product that elicited envy, while malicious envy leads to a greater desire for a related but different product. Only in the Benign Envy condition did a significant relation exist between the felt jealousy and the WTP for an iPhone, and only in the Malicious Envy condition did a (marginal) significant relation exist between felt jealousy and the WTP for a BlackBerry. To conclude, only benign envy increases the WTP for a product that causes this envy, while only malicious envy triggers a desire for a different product from the same category that stands out on another important product attribute.

Table 5.3 Regression analyses of jealousy ratings on the willingness to pay for the iPhone and BlackBerry in Study 5.3

		Jealousy in Relation to Willingness to Pay			
WTP for	Condition	*N*	β	*t*	*p*
iPhone	*All Conditions*	*62*	*.42*	*3.56*	*.001*
	Control	20	.39	1.79	.090
	Malicious Envy	21	.26	1.19	.247
	Benign Envy	21	.47	2.34	.030
BlackBerry	*All Conditions*	*62*	*.34*	*2.82*	*.006*
	Control	20	.19	0.80	.432
	Malicious Envy	21	.43	2.08	.052
	Benign Envy	21	.13	0.55	.586

Note. Jealousy ratings were measured on a scale from 1 (not at all) to 7 (very much so). WTP measured in euro.

General discussion

Two answers exist to the initial question how envy increases product value. First, Studies 5.1 to 5.3 found that being benignly envious makes people willing to pay more for a product that elicited the benign envy. Benign envy is a frustrating experience caused by comparing oneself to another person who has something attractive (an iPhone in the studies presented in this chapter), and it is deserved that this other person has this product. The resulting benign envy triggers action tendencies aimed at lowering this gap between oneself and the other by trying to attain the coveted good for oneself as well and thus leads to a higher WTP for that product.

Second, participants who were maliciously envious (which is triggered if people think the advantaged position of another is not deserved) did not want to pay more for the envy eliciting product, but they were willing to pay more for another product from the same category (a BlackBerry in Study 5.3). This process, called *social differentiation* (Lemaine, 1974), allows people to stop comparing themselves to another person in the domain in which they are outperformed, and look for another domain in which they can outperform the envied person. Chapter 2 indeed found that one of the action tendencies of malicious envy is to distance oneself from the envied person By obtaining a product that differentiates oneself from the envied person (e.g., the more serious BlackBerry compared to the frivolous iPhone) this tendency is acted upon.

An interesting question remains, namely whether feeling maliciously envious only increases the desire for a related product as the one that is envied, as found in Study 5.3, or does it maybe increase the desire for *any* product? The only coping response of the maliciously envious participants in Study 5.3, was to increase the desire for the BlackBerry. Therefore, the alternative explanation that malicious envy just triggers an increased desire for all products (except the envied one) can not yet be ruled out. To explore this, a follow-up study with the same set-up as Study 5.3 was run, but with only the Control (n = 23) and Malicious Envy (n = 23) conditions. Besides asking for the WTP for an iPhone and Blackberry, participants also indicated what they would be willing to pay for a hedonic good (a weekend to Barcelona, including flight and hotel) and a functional good (a 2GB USB memory stick). The results of this extra study can be found in Table 5.4. As expected, being maliciously envious only increased the desire for products from the same category, and not just product desires in general.

Besides investigating how the emotion of envy influences the perception of product value, the research presented in this chapter also provides a plausible mechanism underlying phenomena like keeping-up-with-the-Joneses (the idea that people want to have what relevant others have). Keeping-up-with-the-Joneses is the descriptive finding that people compare themselves to relevant others, and base their needs and wants on what they lack compared to those others instead of merely looking at their

Table 5.4 Willingness to pay for various products per condition

	Control		Malicious Envy		Statistics		
WTP for	*M*	*(SD)*	*M*	*(SD)*	*t*(44)	*p*	*d*
iPhone	187	(117)	201	(72)	0.49	.629	.15
BlackBerry	157	(82)	238	(140)	2.41	.020	.73
Weekend Barcelona	260	(89)	296	(147)	1.02	.312	.31
USB memory stick	35	(21)	46	(29)	1.55	.127	.47

Note. n = 23 per condition. WTP measured in euro.

own preferences (e.g., Frank, 1999). If a neighbor owns a better lawnmower that makes his grass appear greener, a benignly envious person might be compelled to keep up with the neighbor by buying one. Frank hypothesized that the more similar people are to the Joneses, the more they want to keep up with them. This is consistent with the literature that finds that envy is more intense if one is similar to the envied other (Salovey & Rodin, 1984).

The envy explanation also helps to make new predictions on phenomena like keeping-up-with-the-Joneses. The deservingness of the situation is a key aspect in determining whether people are influenced by the possession of others. If it is deserved that someone has an attractive product, people are likely to become benignly envious and to want the product more as a result. If it is undeserved, people are more likely to become maliciously envious and to focus their attention on related products. Therefore, whatever influences the deservingness of a person owning a product might increase sales via benign envy. For example the effort put into obtaining something obviously influences the deservingness of a situation, but also liking the other person would probably be related to perceiving something to be more deserved. Interestingly, a situation that is undeserved even if the envied person could not do anything about it, (e.g., if the envious person is shorted by a third person, while the envied is not) is still likely to result in malicious envy and the subsequent behavior.

Which products are likely to elicit envy?

After establishing this link between envy and consumer behavior, an interesting question that remains is which products are actually likely to elicit envy. Two likely necessary preconditions for products to elicit envy

are found in research on reference group effects and conspicuous consumption (Bearden & Etzel, 1982). Conspicuous consumption and reference group effects were more likely for luxurious goods than for necessities, as some exclusivity is necessary. Furthermore, the products should obviously be visible: goods that are not noticed, can not be envied either. The advertising agency Young and Rubicam (2006, p. 12) states this somewhat differently, although visibility and exclusivity still seem to lie at the core, when they state that products that elicit envy are those that a) get noticed by everyone, b) are not everyday items, c) are polarizing, and d) are somewhat mysterious.

Interestingly, making something more expensive immediately increases the exclusivity and increases the potential to elicit envy. Increasing the price of a product might therefore not only provide a better profit margin, but could also boost the sales as the lower availability increases its desirability by triggering envy. Another direction that follows from the visibility precondition for envy is that distinctive designs or strong brand logos are necessary for products to elicit envy. However, if these products become too familiar, they might then seem very easily attainable and thus lower the envy appeal.

Besides the product itself, other aspects of a consumer experience can also trigger envy. For example, people who recalled an experience in which a friend paid less for a similar product also recalled having been more envious (Ackerman & Perner, 2004). When other people are given preferential treatment over oneself, satisfaction will be lower (Goodwin & Ross, 1992) and envy seems likely. It would be interesting to investigate the role of envy in the acquisition process of products, especially for products that are deemed exclusive. Airlines seem to catch up on this by giving preferential treatment to frequent flyers, by allowing frequent flyers to jump the queue, regularly rewarding them with upgrades to business class seats, and providing luxury waiting areas. If this is done in full view of the rest of the passengers this is likely to elicit envy in them, which might subsequently increase their interest to the frequent flyer program and make them more loyal.

Limitations of the current research

Two limitations of the research in this chapter are worth discussing. First, I only asked participants what they would be willing to pay for a product that they envied, but their decision had no real consequences for them. So, although strong envy premiums are found (usually around 50%), it remains unclear whether these effects will be equally strong when consumers really expect to pay these prices. Second, only an iPhone was used as the product that should trigger envy. The reason for this is that at the time of the studies this was a product that many people would like to have. Normally, product preferences of people are highly diverse, and it can therefore be difficult to find envy effects because what person A envies might not elicit envy in person B. Using the iPhone that instigated envy in many people allowed clean manipulations in which all participants received the same stimuli. However, because of this, it remains unclear whether the current effects will also be present for other products and further research into the effects of envy would add much if they could find out which products are most likely to elicit envy.

Conclusion

The current research suggests that when people feel that it is deserved that others have the exclusive product that they have, this likely elicits benign envy, which leads to an increased desire to have what the other has. However, if people feel that it is not deserved, malicious envy is more likely, which leads to more negative behavior (as previous research found, Smith & Kim, 2007) or it might lead to a higher desire for alternative products, to differentiate themselves from the envied other. Marketing managers trying to use the power of envy should be aware of this as it is not without reason that envy has been viewed so negatively throughout the ages; make sure that the customers that own your envy eliciting product are perceived to deserve it, because that way they are not mistreated by the envious and sales potentially increase.

6

Warding off the evil eye: When the fear of being envied increases prosocial behavior

The fear of being (maliciously) envied makes people act more prosocial in an attempt to ward off the potential destructive effects of envy. People in a superior position who were likely to be envied were more likely to help a potentially envious person pick up erasers she accidentally dropped (Study 6.1). Importantly, only if the better off were likely to be maliciously envied did the helping behavior (giving time-consuming advice) increased, not if they were likely to be benignly envied (Study 6.2). Participants who could be envied only helped the potentially envious more, but not others, supporting the idea that the better off act more social as an appeasement strategy. It is concluded that the fear of being envied serves a useful group function, as it triggers social behavior that is likely to dampen the potential destructive effects that can result from envy, and simultaneously helps to improve the situation of the worse off.

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Chapter 6.

While studying Polynesian fishers, the anthropologist Firth (1939) noticed some seemingly odd behavior. When one fisher caught fish while others did not, he would give all of his catch to the others. If he would not do so, these others would talk bad about him back in the village. This sharing behavior was explicitly called "*te pi o te kaimeo*"; the blocking of jealousy. In this chapter such possible consequences of being better off than others are investigated. Specifically, it is tested whether people act more prosocially after outperforming others because they fear being envied.

Outperforming others leads to mixed feelings. A high achiever can feel happy and proud, because doing better than others increases one's social standing (Festinger, 1954; Smith, 2000). However, an increased social standing per definition means that others have a relatively lower social standing, which elicits negative affect in them (Tesser, 1988). People do not like to be the cause of the negative feelings of another person, and therefore outperforming others can also cause distress. One specific type of negative affect that arises when a person is outperformed, is the emotional experience of envy. Envy "occurs when a person lacks another's superior quality, achievement, or possession and either desires it or wishes that the other lacked it" (Parrott & Smith, 1993, p. 906).

Envy is a frustrating experience that often leads to vicious behavior towards the envied. For example, envious persons are less cooperative toward the envied (Parks et al., 2002), are willing to destroy money of the envied person (Zizzo & Oswald, 2001), experience more Schadenfreude if something bad happens to the envied person (Smith et al., 1996; Van Dijk et al., 2006), and like the envied person less (Schaubroeck & Lam, 2004). If envy can have such negative effects for the person who is envied, it seems warranted to feel distress when one outperforms another person and expects this other person to become envious. Because people often do better than others, it seems plausible that a mechanism exists that helps to prevent the potential destructive effects of envy.

The research presented in this chapter tests the idea that the fear of envy indeed makes people act more prosocially to appease the envious. Testing this is important, because if the fear of envy indeed influences the behavior of an outperformer, the envy literature provides a good basis for

making new predictions regarding the behavior of those who outperform others. For example, two types of envy exist, namely benign and malicious envy (see Chapter 2). Both types of envy activate the goal to level the difference between oneself and the envied person. For benign envy, the motivational tendencies are productive and aimed at improving one's own position, while for malicious envy the motivational tendencies are destructive and aimed at pulling down the envied person. It would therefore make sense that an outperformer only fears being maliciously envied, but not being benignly envied. The envy research thus makes specific predictions on when and in what situations an outperformer is expected to behave more socially.

Whereas envy receives more scholarly attention in recent years (Miceli & Castelfranchi, 2007; Smith & Kim, 2007), the effects of being envied by others have largely been ignored. This is odd because inequalities between people occur often, and the destructive side of envy can be a serious threat to interpersonal relationships and group cohesion. Studying the ways that people cope with the potentially envious therefore seems important. Possible ways to prevent the negative consequences of envy are to conceal an advantage, to downplay the achievement, to avoid the envious person, or to compliment the other to show that in another domain the envious person is actually the better off (Parrott & Rodriguez-Mosquera, 2008). This does come at a cost, however. By downplaying or hiding an advantage some of the possible gains of outperformance, such as an increase in status, will not occur. If the cost of hiding or downplaying the advantage are too high or if hiding is impossible, other coping mechanisms should be likely to exist. Foster (1972) hypothesized that people who think they are envied would share their advantage, but this is often impossible because many envied advantages can not be shared (e.g., a good grade on an exam). I agree that sharing would be a possible way to cope with being envied, but think that this is only one possible reaction that is part of a more general motivation to appease to the envious person.

When investigating the effects of the fear of being envied, it is important to distinguish it from inequality aversion (Fehr & Schmidt, 1999; Messick & Sentis, 1985). Parks et al. (2002) have for example investigated

how people behaved when they were worse or better off than another participant. They had students play a repeated prisoner's dilemma with unequal pay-offs, and found that those who could earn more points per round cooperated more than those who earned less points per round. Although this pattern of results is consistent with the reasoning outlined before, there are a number of viable alternative explanations. First, these responses would also occur if people are inequality averse. Second, the better off may have cooperated more because it was in their *material interest* to do so in the experiment (they could earn more from cooperation and therefore also lose more from a possible deadlock of the prisoner's dilemma game). The effects of the fear of envy on prosocial behavior are investigated in two experiments and both inequality aversion and material interests are excluded as alternative explanations. Study 6.1 provides a pure demonstration of the effect. Study 6.2 reveals the fear of being envied as the process for the increased helping behavior following outperformance, and shows why it is important to disentangle the effects of the fear of being envied from, for example, inequality aversion.

Study 6.1

This experiment tested whether participants who were in a situation in which they could be envied would act more socially. Participants received a €5 bonus, while they thought that another participant (actually a confederate) did not receive any money. It was expected that the better off would behave more prosocially in an attempt to prevent or dampen the envy in the other, compared to a control condition in which participants thought that both had received €5.

Method

Sixty participants (49 females, M_{age} = 20.0 years) were assigned to either a Control condition (n = 31) or an Envied condition (n = 29). Participants came to the lab and met a confederate in the waiting room. The participants and confederate were all seated in separate cubicles and started working on a set of twenty difficult multiple choice questions. After this, they were told that the next study investigated the effects of financial

incentives. Via the computer they were coupled with another participant (always the confederate), who was termed their partner for the remainder of the experiment. The experimenter told them that she would pay some participants €5, to see whether that would influence the performance on a subsequent computer task. In the Control condition, the experimenter told the participant and confederate that they would both get €5. In the Envied condition, the experimenter told the participant that because (s)he had the lowest score on the previous test, (s)he would get €5, while the other participant (the confederate) would receive nothing[1].

After the manipulation, the main dependent measure was registered. Participants followed the experimenter outside of their cubicle to receive the €5. The confederate also left the cubicle and accidently tipped over a pile of 15 erasers that were positioned on the corner of a table in the lab. These erasers scattered around the lab and the experimenter registered whether the actual participant helped picking up the erasers.

Results and discussion

In the Control condition, only 3 out of 31 participants (10%) helped with picking up the erasers. In the Envied condition 11 out of 29 helped (38%), a significant increase, $\chi^2(N = 60) = 6.69$, $p = .010$.

This experiment found that in a situation that is likely to elicit envy, those who could be envied became more helpful compared to those who could not be envied. It seems unlikely that material interest accounts for this, because there was no material benefit gained from helping to pick up the erasers. Also, inequality aversion seems an unlikely cause as helping to pick up erasers does not restore any financial inequality that might have been experienced.

[1] Another group of students was used to pretest this manipulation. They imagined being in the Control (n = 26) or the Envied condition (n = 26), after which they indicated how jealous they thought the partner would be (1 = not at all, 7 = very much so). Like in previous chapters, jealousy was asked for instead of envy, because people generally use the term jealousy to describe instances of envy (Smith et al., 1988) and because people rather admit being jealous than envious (Foster, 1972). As expected, the Control participants thought the partner would be much less jealous (M = 2.88, SD = 1.80) than the Envied participants (M = 4.96, SD = 1.69), $t(50) = 4.30$, $p < .001$, $d = 1.19$.

Study 6.2

Study 6.2 examined whether it is the fear of envy that drives helping behavior more directly, by adding process measures. To show why it is important to study the effect of the fear of being envied, two envy conditions were created; one in which participants were likely to be maliciously envied and one in which they were likely to be benignly envied. Although both types of envy are frustrating experiences, benign envy produces behavior aimed at improving one's own position, whereas malicious envy induces tendencies aimed at pulling down the envied person (see Chapter 2). It was predicted that participants who were better off would expect the others to be envious regardless of the type of envy experienced, but to only fear being maliciously envied. A key factor that determines whether benign or malicious envy is felt, is the perceived deservingness of the situation (see Chapter 3). I therefore predicted that participants would act more prosocially when they are in an enviable situation that is perceived to be undeserved (likely to elicit malicious envy) than when it is perceived to be deserved (likely to elicit benign envy). If this were to be found, it would also effectively rule out that mere inequality aversion accounts for the effects, because that would be operative under both envy types.

Method

Ninety three participants (65 females, M_{age} = 19.9 years) received a bonus of €5. In the Control condition participants thought that their partner (another participant with whom they were allegedly coupled) also received this bonus, excluding envy. In the other two conditions envy was possible because the other participant did not receive a bonus. In the Benignly Envied condition this advantage was deserved, in the Maliciously Envied condition it was undeserved.

Participants came to the lab for a series of unrelated experiments, of which the current study was part. They were paid €7 for their participation in the session. After the participants were seated in a cubicle, they entered their initials so "we could keep track of their scores". They were always coupled with another participant, of whom they would see the scores on the

first task. The other participant did not actually exist, but all effort was taken to make this believable.

The first task consisted of answering seven difficult multiple choice questions. Next, they were told that for a study on the influence of financial incentives on performance, some participants would receive an unexpected €5 bonus, while others would receive nothing. In all conditions, participants learned that they were selected to receive the bonus of €5. In the Benignly Envied condition, a participant learned that because (s)he had answered one more item correct on the first multiple choice task, (s)he would receive €5, while the other participant would get nothing. In the Maliciously Envied condition, a participant learned that because (s)he had answered the least items correct (one less) on the first multiple choice task, (s)he would receive €5, while the other participant would not. Participants in the Control condition also learned that they had made one more mistake than their partner had, but both would get €5.

After the participants received their additional €5 for this experiment, a next study started that covertly measured their helping behavior. This task was another multiple choice task with seven questions, but this time one of the participants could ask another participant for advice. The partner was always the one selected to be able to ask for help. The partner (ostensibly) asked for help for every single question, and answering each request took about 20 seconds (under the cover that it took this long for the computers to connect and send the answer to the other participant). For each request, the participant could choose to send the answer (s)he thought was correct, to indicate that (s)he did not know the answer, or to ignore the request for advice and stop advising from that point on. The main dependent variable was how often the participant answered to the request for help (either by giving an advice or by indicating that they did not know the answer).

After the measure of helping behavior, a number of questions related to the situation when they received €5 were asked; how deserved they felt it to be, how happy they felt when they learned that they would receive an additional €5, how guilty they felt, whether they thought that the other person felt threatened, whether they thought that the other had been

jealous, and whether they were somewhat afraid of the jealousy of the other. The deservingness measure was rated on a scale from very undeserved (1) to very deserved (7), all other questions on a scale from not at all (1) to very much so (7).

Results

The results of Study 6.2 are presented in Table 6.1. A MANOVA with the three conditions as the independent variable and the feelings as the dependent variables, showed a strong effect of the manipulation, $F(12, 170) = 23.25$, $p < .001$, $\eta_p^2 = .62$. The manipulation of deservingness had worked, as those in the Maliciously Envied condition found their advantage much less deserved than those in the Benignly Envied condition. All participants were fairly happy with the €5, reflecting that the bonus was attractive and making it likely that such a bonus has the potential to elicit envy.

Table 6.1. Experienced feelings when participants learned that they would get €5 per condition in Study 6.2

		Envied		Statistics		
	Control	Benign	Malicious	$F(3, 134)$	$p \leq$	η_p^2
I felt that it was deserved	4.16[b] (1.75)	4.71[b] (1.19)	2.03[a] (1.11)	32.53	.001	.42
I felt happy	5.52 (1.24)	5.71 (1.10)	5.23 (1.43)	1.15	.320	.03
I thought the other would be jealous	1.65[a] (1.08)	4.71[b] (1.24)	5.23[b] (1.18)	85.05	.001	.65
I was afraid for the jealousy of other	2.13[a] (1.31)	2.52[a] (1.29)	3.74[b] (1.57)	11.29	.001	.20
I felt guilty	1.61[a] (1.12)	2.65[b] (1.50)	4.52[c] (1.41)	36.80	.001	.45
I think the other felt threatened	1.94[a] (1.32)	4.00[c] (1.44)	3.13[b] (1.38)	17.49	.001	.28

Note. All questions measured on a 7-point scale ranging from 1 not at all to 7 very much so, except deserved which was measured on a scale from 1 very undeserved to 7 very deserved. SD between brackets. Means with a different superscript differ significantly between conditions, tested with LSD post hoc, all p's ≤ .015.

Figure 6.1 provides all data on the helping behavior of the participants in the form of a survival analysis. Kaplan-Meier survival analysis (Kaplan & Meier, 1958; Mantel, 1966)[2] was conducted because the helping behavior data is non-normally distributed and has a fixed end-point. As expected, the survival functions differed significantly between conditions, Breslow $\chi^2(2) = 10.20$, $p = .006$. Those in the Maliciously Envied condition ($M_{advices} = 6.77$) helped significantly longer than those in the Control condition ($M_{advices} = 5.32$), Breslow $\chi^2(1) = 7.88$, $p = .005$, and those in the Benignly Envied condition ($M_{advices} = 5.39$), Breslow $\chi^2(2) = 10.43$, $p = .001$. The helping behavior in these latter two conditions did not differ, Breslow $\chi^2(2) = 0.03$, $p = .875$.

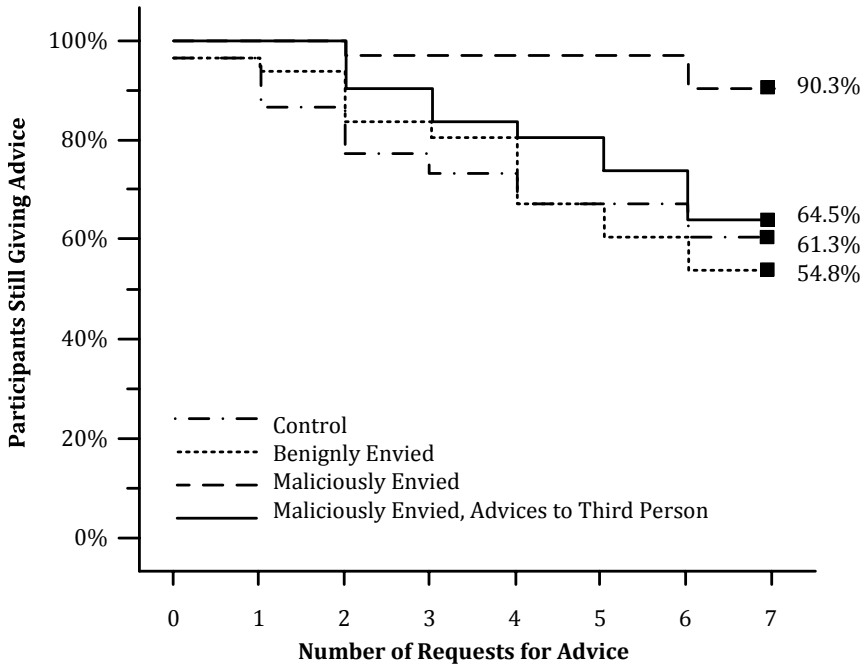

Figure 6.1 Survival analysis of helping behavior in Study 6.2

Note. Downward steps from left to right in the curves indicate that participants stopped helping at that point.

[2] An ANOVA provided the same results, $F(2, 90) = 5.40$, $p = .006$, $\eta_p^2 = .11$.

People who were undeservedly better off than another person continued to help those who were worse off longer, compared to those who were deservedly better off, and those who were not better off. It was predicted that the process behind this would be the fear of being envied. Table 6.1 shows that the participants who were better off in both the Benignly Envied and Maliciously Envied condition considered it likely that the other person would be jealous of them. As expected, the intensity of the expected jealousy did not differ for both types of envy (because benign and malicious envy tend to be equally intense). What did differ, however, was their response on the question how afraid they were that the other would be jealous. Confirming the main hypothesis, those in the Benignly Envied condition were not afraid of this, while those in the Maliciously Envied condition were afraid of the other being jealous.

Those who were better off also felt somewhat more guilt than those in the Control condition, with those in the Maliciously Envied condition feeling guilty the most. The participants who were better off also expected the other participant to feel more threatened than those in the Control condition. Those in the Benignly Envied condition expected the others to feel threatened more than those in the Maliciously Envied condition, probably because only in the Benignly Envied condition the participants thought that they had scored better on the difficult multiple choice task.

To test whether it really is the fear of being envied that led to the increased helping behavior for those who were undeservedly better off, an ANCOVA with "condition" as the independent variable, the helping behavior as the dependent variable, and the fear for the other's jealousy, the thought that others would be jealous, the felt guilt, and the thought that others would feel threatened as covariates, was performed. As expected, adding these covariates eliminated the effect of condition on helping behavior, $F(2, 86) = 1.89$, $p = .157$, $\eta_p^2 = .04$. Crucially, of the covariates, the effect of the fear for the other's jealousy was the only variable that had an effect, $F(2, 86) = 3.68$, $p = .058$, $\eta_p^2 = .04$, the other variables clearly did not, F's < 1.[3] Thus,

[3] Repeating the ANCOVA with only the fear of jealousy as the covariate yielded the same results. The effect of condition also became insignificant, $F(2, 89) = 2.32$, $p = .104$, $\eta_p^2 = .05$, with the effect of the fear of the other being jealous being marginally significant, $F(2, 89) = 3.77$, $p = .055$, $\eta_p^2 = .04$. This rules out the possible influence of multicollinearity.

when controlling for the fear of being envied, the effects of the manipulation on helping behavior disappeared.

Discussion

People who are in a situation in which it is likely that they are maliciously envied, fear being envied and behave more socially as a result. Those who are likely to be benignly envied also think that others will be envious of them, but do not fear this and therefore do not act more socially.

An interesting question is whether those who think they could be maliciously envied are helping more because a general tendency to be social is activated, or because they somehow want to make up with the person who is maliciously envious. If it really is the fear of envy that instigates the helping behavior, people are expected to be only more helpful towards someone who is (or could be) maliciously envious.

To test this, one more condition was added (n = 31). This condition was the same as the Maliciously Envied condition, except that before the measure of helping behavior, the participants was supposedly linked to yet another participant (who did not know about the previous unequal distribution of the €5). If the fear of being maliciously envied makes people more prosocial in general, the participants are predicted to help this outside person more as well. However, if the helping behavior exists to appease the maliciously envious person, the theory would predict that the participants would not help this outside person more.

The helping behavior of the participants in this condition is also presented in Figure 6.1. The survival function of this group of participants does not differ from those in the Control and Benignly Envied conditions, Breslow χ^2's(1) ≤ 0.91, p ≥ .341, but it does differ from that of the Maliciously Envied condition, Breslow $\chi^2(1) = 6.10$, p = .014. Participants who could be maliciously envied thus only helped the potentially envious more, even though these others were also worse off and inequality thus existed. This suggests that the helping behavior that results from a fear that others are maliciously envious is likely to be aimed at appeasing the envious person.

Chapter 6.

General discussion

People in a position in which they were likely to be envied, were more likely to help a potentially envious person to pick up some erasers she accidentally dropped (Study 6.1). Importantly, only if the better off were likely to be maliciously envied did the helping behavior (giving time-consuming advice) increased, not if they were likely to be benignly envied (Study 6.2). The fear of being maliciously envied caused this effect, and not mere material interest or inequality aversion because a) helping occurred even without any possible material gain for the envious, b) only in situations of malicious envy, and c) because only the potentially envious person was being helped more and not others (even though these others were also worse off). To conclude, I find that people who fear being maliciously envied act more prosocially towards the envious person.

The current results point to the importance of studying the fear of envy for the behavior following a situation in which one is better off. Other theories exist that also predict increased helping behavior for people who are better off, and although they certainly can predict behavior in some instances, these theories can not explain the current results. Let me briefly explain why. First of all, because people do not become more helpful when they are better off and likely to be benignly envied, it does not appear to be the case that people act more prosocial because they are averse to inequalities in general. Second, the fact that those likely to be benignly envied do not help more also excludes a "noblesse oblige" explanation, that people help more from a general idea that the highly ranked should act honorably and beneficently towards the lower ranked (Fiddick & Cummins, 2007).

A broader framework that describes the consequences of outperformance is the STTUC-model (Sensitivity about being the Target of a Threatening Upward Comparison, Exline & Lobel, 1999). People experience distress (become STTUC) after an outperformance when they 1) realize that they outperformed another, 2) perceive the other to be threatened by this, and 3) feel concern about this situation. The concern that is felt after outperformance can be about consequences for oneself, the other, or the relationship. I think that the fear of being envied leads to concerns for

oneself and for the relationship, and fits within the broader theory of the STUCC well. However, the more specific prediction that people only help more when they are likely to be maliciously envied is not made by the STUCC-model. Furthermore, participants did not help another person more when this other person felt threatened, a key assumption of the STUCC-model. The STUCC-model integrates various findings in the literature on outperformance well, but to predict the behavior of the outperformers one needs to look at the specific feelings the outperformed person experiences (or is thought to experience by the outperformer). The perceived feeling of the other person by the outperformer determines the behavior of the better off.

The finding that people who fear being envied will act more socially helps to explain how people can function in groups in which inequalities do often exist. After all, a colleague often receives a nicer assignment, a friend regularly chooses a better dish than you did, and the grass of your neighbors garden always looks greener than yours. If all these frequently occurring inequalities give rise to envy with its potentially destructive effects (Smith & Kim, 2007), preventing or dampening these envy effects seems important. The fear of being envied, and the behavior that follows from that, serves as a social lubricant that smoothens the interaction and fosters group cohesion.

7

Conclusions and discussion

In the final chapter of this thesis, the theoretical and practical implications of the research presented in this thesis are discussed. This is done by posing the questions from Chapter 1 again, and present what the current thesis provides as additional insights. Furthermore, a model is discussed that describes when each type of envy, but also admiration is likely to result after an upward social comparison. Finally, a few comments are made that might help other scholars explore the fascinating topic of envy some more. Note that envy is linked to real life behavior in this chapter, and of course this behavior often has multiple determinants. I certainly do not claim that envy is the sole cause of these behaviors, but it surely is a potent one.

What is envy (and what is it not)?

Envy is the frustrating feeling that arises from comparing oneself to a superior other person. However, the most important finding of this thesis is probably that two types of envy exist. The first, malicious envy, is the stereotypical form of envy: its motivational tendencies aim to resolve the frustration that another is better by pulling down this other person. The effects of this type of envy have been documented before (Duffy & Shaw, 2000; Parks et al., 2002; Smith, 1991; Smith et al., 1994; Zizzo & Oswald, 2001). The other type of envy, benign envy, did not receive any empirical attention so far. Although there has been some speculation about the existence of multiple types of envy (Neu, 1980; Rawls, 1971; Taylor, 1988), these ideas had not been empirically tested and the descriptions of the various types of envy varied.

I tested whether a benign form of envy actually exists, whether it occurs frequently, and what action tendencies it might be associated with. Chapter 2 found that benign envy differs from malicious envy, from the feelings it triggers to the actions it leads to. Benign envy is the more uplifting type of envy; people like the envied person more, want to be closer

to this other, and give more compliments than those experiencing malicious envy. On top of this, the benignly envious want to improve their own position by moving-up. It is striking that they still feel inferior and frustrated, but the motivational and behavioral consequences are rather positive. I expect that exactly this frustration helps to trigger the positive motivation that results from benign envy, as the frustration is also a signal that the coveted object is worth striving for. Note that when prompted for envy, about half the people in the U.S. and one in three in Spain reported an instance of benign envy, the rest of one of malicious envy. Although benign envy has not been studied empirically so far, it does seem to occur often.

The experiences of benign and malicious envy normally do not co-occur; in Studies 2.2, 2.3, and 3.2 the experiences are correlated negatively. This suggests that the more a person experiences one type of envy, the less one experiences the other type. It is, however, likely for one type of envy to relatively easy "transmute" into the other type; the experiences are rather close and if a person starts to perceive the situation to be somewhat more (or less) deserved the resulting experience is likely to change.

Benign envy and admiration. Another previously untested finding in this thesis is that benign envy also clearly differs from admiration, which contrasts earlier ideas (Parrott, 1991; Rawls, 1971; Smith & Kim, 2007). Admiration is a feeling of delighted approval of the accomplishment or character of another person. Ortony et al. (1988) consider admiration to be the central emotion of the "appreciation emotions"; appreciation, awe, esteem, and respect. The most striking difference between benign envy and admiration is that the latter feels positive, whereas the former clearly does not. Another difference, however, is more unexpected. Admiration is found to be unrelated to tendencies aimed at improving oneself, while benign envy is. Recently, Algoe and Haidt (2009) found that people who admire someone state that they do become inspired, which sharply contrasts the findings of Chapters 2 and 4. This could be due to the use of different control conditions in their studies compared to those in this thesis, but most importantly, I find that admiration does not increase performance, while benign envy does.

Two questions regarding the lack of a motivational influence of admiration arise. First, why does benign envy motivate, while admiration

does not? The likely answer consists of two parts. Johnson and Stapel (2007a) found that upward comparisons only stimulate performance when they are somewhat frustrating (a "no pain, no gain" principle). Because admiration feels positive, this is not likely to trigger a motivation to work harder. However, the question remains why admiration feels positive and benign envy feels negative. Chapter 2 found that people who admire someone do not explicitly compare themselves to the superior other, they did not describe their own performance relative to that of the superior other. Some comparison is being made, however, as all performance is evaluated relatively to that of others. When a person is envious, the self appears to become activated and the superior performance is compared to that of oneself, while this does not appear to be the case for admiration. Because of this, the superior performance of the other reflects bad on oneself when one is envious, but not when one admires someone. This idea is based on the content analysis of the episodes of benign envy and admiration in Study 2.1, and further research might be necessary to verify it.

When talking to people about this research, many respond with disbelief. They do not think that their performance will become better when they think of someone whom they benignly envy. The current research does suggest, however, that this is likely to be the case. People often do not realize that certain things influence them, while they obviously do (Jones & Harris, 1967; Van de Ven, Gilovich, & Zeelenberg, 2009). In Study 4.3 participants who were mainly benignly envious did also indicate that they admired the superior person. The main reason for this, I think, is that people do not like to admit that they are envious and therefore call it admiration. This would also explain why many people think that admiration stimulates improvement, while it actually is benign envy that does. What admiration might do is discussed in the section that describes the model presented in Figure 7.1 of when envy and admiration follow from an upward social comparison.

What do people envy?

In general the research in the current thesis confirms the idea that, like for all emotions, envy is elicited by things that are important to a person

(Salovey & Rodin, 1984). The domains typically vary from performance at school and sports, to being attractive and successful. In the consumer domain, the iPhone was a product that easily elicited envy in people in the years 2006 to 2008 when we ran the studies of Chapter 5. By now it is a more common product, and it probably lost some of its "envy potential". An interesting question is which products are actually likely to elicit envy. Two likely preconditions for products to elicit envy are found in research on reference group effects and conspicuous consumption (Bearden & Etzel, 1982). Conspicuous consumption and reference group effects are more likely for luxury goods than for necessities, as some exclusivity is necessary. It is therefore not surprising that it was Gucci (an exclusive brand) that named their perfume (a luxury good) *Envy*, and not Wal-Mart who named a deodorant that way. For products to elicit envy, they should obviously be visible: goods that are not noticed, can not be envied. The advertising agency Young and Rubicam (2006, p. 12) states this somewhat differently, although visibility and exclusivity still seem to lie at the core, when they state that products that elicit envy are those that get noticed, are not everyday items, are polarizing, and are somewhat mysterious.

Interestingly, making something more expensive increases the exclusivity and therefore also the potential to elicit envy. Increasing the price of a product provides a better profit margin, but could even *boost* the sales as the lower perceived availability increases its desirability by triggering envy. If visibility is necessary for envy, distinctive designs or strong brand logos increase the chance that a product elicits envy. However, if these products become too familiar, they might be seen as very easily attainable, which lowers their envy appeal again.

Another relevant concept regarding what people envy is that of positional goods. Positional goods are objects that are sought after more for their relative value, than for their absolute value (Hirsch, 1976). For example, many people state that they would rather earn €40.000 while others earn €30.000, than €50.000 when others earn €60.000 (Frank, 1985). Other positional goods include clothing or houses, but also attractiveness (Solnick & Hemenway, 1998). Not all goods are positional though. People prefer three weeks of vacation while others get four, over

two weeks while others have only one. Frank (2007) finds that goods that are more readily observed by others are more likely to be positional goods. It seems that envy is likely to be the process that makes these goods positional; people anticipate that they will feel envy when others have a higher income, and will therefore settle for a lower income in absolute terms if that helps to prevent envy.

Note that benign envy is seen as a positive force that can stimulate people to attain more. However, benign envy can obviously have negative consequences as well. For example, due to benign envy, people mainly go after the things that are easy to compare with others, and they might focus too little on important things that are less easy to compare (Carter & Gilovich, 2009). As discussed above, people often compare their income to that of others, but they are less likely to compare the hours available for leisure. Because of this, envy is expected to be stronger for income than for time spend on leisure activities, and in a society with much benign envy people might keep striving for more income at a cost of time for leisure, even though both are important to people.

Who is envious?

The research presented in this thesis provides some potential future grounds for investigating which persons are likely to experience envy, or at least who are likely to experience benign or malicious envy. Especially the work in Chapter 3 on the situational characteristics that elicit benign or malicious envy is helpful. Recall that people are most likely to experience malicious envy when they perceive the situation to be undeserved and more benign envy when they perceive it to be deserved. Anything in the personality structure of a person that influences the perception of deservingness is thus likely to influence which type of envy is likely to result from an upward social comparison.

People who tend to feel entitled to many things, for example narcissists (Campbell et al., 2004) or people high in power (Lammers, Stapel, & Galinsky, 2009; Weber, 1948), are more likely to find it undeserved that another has an advantage over them and will therefore be more likely to experience malicious instead of benign envy. In contrast, people with a

high "belief in a just world" (Rubin & Peplau, 1975) feel that people generally get what they deserve and are therefore expected to experience benign envy more easily in envy situations. Furthermore, people with an internal locus of control (Duttweiler, 1984) tend to feel that they can easily influence situations themselves, and might therefore be especially likely to experience benign envy.

In Chapter 6 I find that people only fear being envied if it likely to be the malicious type. Therefore, as long as people feel that they deserve their superior position, they will not fear being envied and will not act more prosocial to avoid being envied. Therefore, again the people who feel entitled to things and are in a superior position might not expect to be maliciously envied, and will probably not engage in appeasement behavior to ward off the potential destructive effects of malicious envy.

What do the envious do?

Previous research often documented the destructive nature of envy (Smith & Kim, 2007), and these effects were therefore not studied in this thesis. Instead, I focused on the more positive effects. Benign envy motivates people to perform better: the benignly envious feel inspired (Chapter 2 and 3), they indicate that they plan to study more in the next semester (Study 4.1 and 4.4) and they actually perform better on an intelligence task (Studies 4.2 and 4.3). In contrast to what many people think, when another person does better it is not admiration that stimulates improvement, but it is benign envy that does. This frustrating feeling signals that we miss out on something attractive and that the coveted object is worth working for.

Benign envy also stimulates consumption. A person who feels benignly envious of someone who owns an attractive product is willing to pay more for it (Studies 5.1 to 5.3). Regardless of whether it is a good or bad thing for society that consumption is stimulated, it is again found that benign envy helps people to go after the things they want.

In the consumer domain another action tendency than the normal pulling-down motivation of malicious envy was found as well, namely to differentiate oneself from the envied other. People who were maliciously envious of someone who owned an iPhone, were willing to pay more for a

BlackBerry (Study 5.3). Malicious envy motivated people to do better on another dimension than the one of comparison: if one is maliciously envious of someone who owns a hip and attractive iPhone, the interest for the more serious and functional BlackBerry increased. Whether this effect generalizes to other domains than the consumer domain remains an interesting question. Future research could clarify this, as this has important potential consequences. For example, someone who is maliciously envious of a colleague might not only engage in negative behavior toward this colleague, but might also look for another domain to excel and leave the current job.

An interesting question is what the effect of boasting might be on envy after a superior performance. Boasting is generally perceived to be something negative (Anderson, Ames, & Gosling, 2008), and envy research indeed found that people more easily become envious of someone who boasts (Silver & Sabini, 1978). However, Bacon (1597) thought that someone can better boast after outperforming others, because it will look like there is nothing to hide and that therefore the advantage is deserved. Based on the research presented in this thesis, boasting might indeed be expected to make people more likely to become benignly envious instead of maliciously envious, if it helps to increase the perceived deservedness of the advantage. Schoeck (1969), however, thought that people from the U.S. tend to boast much more than others, because they do not fear being envied. Whether people boast more if they do not fear being maliciously envied, or that they boast more to prevent being maliciously envied, is unclear but certainly an interesting question.

How does it feel to be envied?

In Chapter 6 of this thesis I change the perspective and investigate envy from the viewpoint of the envied person, instead of the envious. People who fear being maliciously envied acted more prosocially in an attempt to appease the envious. Note that people did not mind being benignly envied, and so as long as it is perceived to be deserved that someone is better off, inequalities are accepted by both the envious as well as the envied. This could explain why the U.S. is one of the countries with the largest inequalities in income (Frank & Cook, 1995). After all, the U.S. is also the

country where people believe in the "American Dream", the idea that everything is attainable if you work hard enough. It is likely that the idea that you get what you deserve allows the existence of extreme income inequalities, as they are seen to be deserved and therefore not likely to elicit malicious envy. Schoeck (1969) indeed thought that a society that countered envy in the way the U.S. did was the pinnacle of society. I disagree, as envy together with a fear of envy seems to serve a useful group function. A society that eliminates malicious envy might also loose the benefits associated with it. Let me explain what this group function of envy is.

In a sense, envy together with the fear of being envied, might be seen as a commitment device. A commitment device is a tool that holds a person to his or her promises. For example, in the movie Dr. Strangelove (Kubrick, 1964) the Soviets have installed a Doomsday Device, that will automatically and irrevocably destroy all life on Earth if a nuclear attack were to hit the Soviet Union. This effectively precommitted the Soviets to destroying the world when rockets were fired in their direction, and therefore the Americans can (or should) obviously no longer consider attacking the Soviet Union. A less extreme example is two people agreeing to pay each other €100 every time they light up a cigarette. By setting up such a system, they know that they will be more committed to not smoking because they made smoking very costly. So, how does envy function as a commitment device?

Imagine that 100 euro is to be divided between person A and person B, and that this can be done via two options, an equal distribution (50/50) or an unequal one (70/30). If person A does not know who will receive the 70 euro in the unequal condition, he or she will most likely prefer the equal distribution. Rawls (1971) calls such a choice between distributions in which one's position is unknown a "veil of ignorance". Rawls thinks that from under this veil, people prefer the equal distribution because it is more fair. Another reason is that people might (unconsciously) realize that the subjective value is highest following the law of diminishing marginal utility: normally the gain from 69 to 70 euro for person A has a lower added value than the gain from 30 to 31 euro would have for person B. If people indeed prefer equal outcomes if they do not know whether they would be the better off or the worse off, it is then likely that mechanisms exists that help to

restore equality (at least somewhat) if inequality were to arise. I argue that envy is such a mechanism. People are unlikely to voluntarily give up an advantage they have to restore equality, but they do prefer situations in which the better off would give up part of the advantage if they do not yet know whether they are the better off or the worse off. This is where malicious envy and the fear of it might come in as a commitment device: before a distribution is known, it is already clear that if one person is better off, the other is likely to become envious and act negatively as a result. The better off will therefore likely engage in reparative actions (the prosocial behavior found in Chapter 6), and this creates the more equal position that was preferred a priori under the veil of ignorance.

This idea that envy is a commitment device is also consistent with Frank's (1984a, 1984b) findings that the salary of an employee is not strongly related to his or her marginal productivity, but rather that within companies the wage structure is far more egalitarian than economic theory assumes. If people were asked to choose a wage distribution from under a veil of ignorance, they would probably prefer a rather egalitarian wage structure. I think that the fear of malicious envy makes the better off accept the lower wage compared to what economic theory states that they should earn. A fear of envy thus helps people to adhere to the distribution they prefer if it is unknown who is the better off, even if they have opposing tendencies when the veil of ignorance is lifted; When one finds out that one is the better off, people do not like to give up their advantage as giving up something is extra painful (Kahneman & Tversky, 1979).

Although some malicious envy might thus be beneficial, too much of it would have two strongly negative consequences. First of all, the envious would spend time and effort to damage the person in the superior position, instead of in trying to improve their own position. Second, if others are easily maliciously envious and will try to hurt you as a result, you do not have much motivation to improve your current position. Schoeck (1969) described tribes in Africa where farmers with higher crop returns were accused of witchcraft and punished by the destruction of their crop. These better farmers will have no motivation in the next year to do the best they can, lowering food production and stalling economic progress.

The fear of envy can sometimes be at conflict with other desires people have, one of them being pride. Doing well on something important feels good, and people want to express the pride they feel over it (Tracy & Robins, 2004). By expressing pride, people show others that they did well which can improve their status in the group (Nelissen, 2009). The fear of envy motivates people to do the opposite, and the question is when each of these motivations will be dominant. Based on the current research, one obvious answer is that when the advantage is deserved, fear of envy is not necessary and pride responses are more likely to occur. Another model that might predict when pride or the fear of envy will be dominant is optimal distinctiveness theory (Brewer, 1991). Brewer states that people have two competing desires, namely to fit in a group, but also to stand out and be different from the people within that group. As long as a person feels that he or she does not fit in enough, assimilation motivations exist and the fear of envy is likely to be dominant. When it is clear that the person is a member of the group, but lacks in individuality, differentiation motivations are activated and pride responses are more likely.

The importance of studying envy

If envy can be benign or malicious, understanding when each will occur is of course of tremendous importance. For example, in an organizational setting it clearly matters whether salespeople are benignly or maliciously envious of the top sales person in their group; benign envy is likely to benefit the company (by an increased effort to sell more), while malicious envy can hurt the company (by efforts aimed at thwarting the top sales person). Recent research found that specific emotions of employees predict their behavior best (Nelissen, Nelissen, Peeters, & Zeelenberg, 2009), and measuring their level of benign and malicious envy toward colleagues seems worthwhile given the behavior that is likely to follow from each (improved performance or destructive behavior).

Because of the potential to elicit destructive behavior, organizations would do well to try to prevent malicious envy. Inequalities exist in all organizations, and it therefore seems wise to create systems that make any existing inequalities deserved (or at least perceived to be). I am not the first

to argue this, as much on this is known in the literature on fairness, equality, and equity (Adams & Freedman, 1976). However, the envy literature helps to explain the resulting behavior of people better. As found in Chapter 6, the better off do not help more because they are aversive to inequalities, but rather because they fear being maliciously envied. Furthermore, in some studies on envy (Parks et al., 2002; Zizzo & Oswald, 2001) the undeserved advantage was caused by a third party (the experimenter), but people still reacted maliciously envious and hostile to the envied person; it is unclear to me whether the fairness literature really helps to explain that behavior. I agree that unfair actions are likely to be viewed upon negatively, but why would an unfairly treated person be angry at the person who was benefited, if that other person could not have done anything to prevent it? In my view, envy is needed to explain this behavior. Harnessing envy in for example organizations or sports teams is important; making sure that the inequalities that exist are perceived to be deserved not only prevents negative behavior following malicious envy, it actually promotes positive behavior following benign envy.

Importance of distinguishing envy types for other research areas

The distinction between the two envy types helps to make new predictions in various research areas. A few examples are provided below.

Role models. The idea presented in Chapter 4 that the positive effect of role models goes *via* benign envy might seem counterintuitive at first, but is an interesting idea for further research. Consider the example that female role models have positive effects on other females' math test performance (Marx & Roman, 2002). Females generally tend to perform worse than males on a math test when a male experimenter is present (a result from stereotype threat, see Steele, 1997). However, when a female experimenter was present who was highly competent in math, the performance of the females increased. Marx and Roman attributed this effect to a "buffering effect" of the role model, but an alternative explanation might be that the females are benignly envious toward the superior other. The participants were selected for their interest in math, and for these females a high

achieving role model is likely to elicit benign envy[1]. If this is indeed the case, programs that use role models to provide exemplars to underprivileged kids are best to use people who accomplished things these kids find important and are similar to them (as domain importance and perceived similarity are important for envy to arise), and not just any outstanding exemplar that might more easily trigger admiration.

Schadenfreude. A debate exists on the possible role of envy as a cause of Schadenfreude (the pleasure at the misfortune of others). Some research finds that envy promotes Schadenfreude (Smith et al., 1996; Van Dijk et al., 2005), while other research suggests that other negative feelings such as disliking the other (Hareli & Weiner, 2002) or resentment (Feather & Sherman, 2002) are better predictors of Schadenfreude. Van Dijk et al. (2006) reviewed the previous work on the envy-Schadenfreude link, and noticed that research finding an effect of envy on Schadenfreude used hostility-related questions as a measure of envy, while research not finding such an effect used more desire-related questions. Linking the idea of Van Dijk et al. to the research presented in this chapter, it seems straightforward to predict that malicious envy is related to feelings of Schadenfreude, while benign envy is not. After all, the action tendency of malicious envy is to pull down the superior other, and Schadenfreude is the joy when this action tendency is resolved.

Social comparisons. Research on how people compare themselves to others has been linked to emotions before (Brickman & Bulman, 1977; Buunk et al., 1990), but mainly to the more general experience of positive or negative affect. Although models exist that link specific emotions to social comparison research (Smith, 2000), specific emotional effects following social comparisons have hardly been studied. Looking at specific emotions and their effects helps to understand behavior better than by merely looking at the valence of the experience (Keltner & Gross, 1999; Zeelenberg & Pieters, 2006), and research on social comparisons could therefore benefit

[1] To disentangle the effects of buffering and benign envy, one could use two groups of female students, one for whom math is important and one for whom it is not. Stereotype threat would lower the performance of both groups. A buffering effect of a role model would predict increased performance in both these groups. A benign envy explanation, however, predicts that only those for whom math is important would do better when a female role model is present.

from incorporating these emotions. At the same time, research on emotions could benefit from the wide range of knowledge gained over the years on social comparisons. An example is that research on social comparison usually distinguishes between contrast and assimilation effects (seeing oneself as more different from or more similar to the comparison target). However, a comparison can seem to simultaneously have contrastive and assimilative consequences; when experiencing benign envy a person feels somewhat inferior (a contrast effect), but is also stimulated to do better (an assimilation effect). Taking the typical emotions that result from social comparisons into account can therefore help to make specific predictions on the consequences the comparison.

Group-based envy. Because people identify themselves with a group that they belong to, they can also experience group-based emotions (Smith, 1993). An example is group-based guilt, the experience of guilt for actions taken by one's group (Doosje, Branscombe, Spears, & Manstead, 2006). In a similar way, group-based envy is likely to exist as well. People can identify with a group that is outperformed by another group on an important domain, and feel envy as a result. The Dutch football team is regularly outperformed by the Germans, and Dutch soccer fans clearly envy the Germans (although people might not call it envy, I'm confident that it is). Note that envy is stronger for Germany than for Brazil, for which two reasons might exist: First, the Germans are more similar to us, which is an important antecedent of envy. Second, the Germans do not play that well, but do always score a goal in the final minutes of the game. This makes it rather undeserved that they win, and malicious envy is more likely. Brazil usually does deserve to win, and maybe the Dutch experience more benign envy towards them (or more admiration if the World Cup is seen as unattainable for the Dutch national team).

Although group-based envy has not been studied directly, it is part of a more general model of how outgroups are stereotyped, the stereotype-content model (Fiske et al., 2002). This model poses that stereotypes about outgroups are classified on two dimensions; competence and warmth. Low competence, high warmth groups elicit pity; low competence, low warmth elicit disgust; high competence, high warmth elicit admiration; and high

competence, low warmth elicit envy. Envious prejudice is thus likely if another group performs better, and is not liked as a group. For example, Epstein (2003) thinks that envy contributed to the prosecution of Jews during the second world war. It would be interesting to see whether it matters if the outgroup is seen to deserve the advantage or not: Nazi propaganda against Jews focused on the undeserved situation that they controlled much of Germany without working hard (Herf, 2006). Could it be that undeserved advantages of other groups lead to group-based malicious envy, while more deserved outcomes lead to group-based benign envy? People do indeed feel Schadenfreude when a disliked outgroup suffers a misfortune (Leach, Spears, Branscombe, & Doosje, 2003), so malicious envy is likely to exist for outgroups, but especially the idea of benign envy is interesting. If an outgroup does better and this is deserved, do people become benignly envious and thus motivated to attain more as well?

Envy as a measure of what people consider important. Envy is the frustration that arises when another person succeeds in a domain important to oneself (Salovey & Rodin, 1984). If people are asked what they find important in life, they probably come up with rather broad (and socially desirable) constructs. Envy could be used to more indirectly measure what people actually find important in daily life and what they actually strive for. If you were to ask me what I find important, the answer probably would be world peace. If you were to ask me whom I envy, the answer would be a scientist who is doing world class research. My actual behavior indicates that the latter is more important to me in daily life; I spend many hours a week doing research, and only a few euro a year on having others try to attain world peace. Because envy is a universal phenomenon, it can be used to investigate what people in different cultures actually find important and strive for in their daily life.

A model of emotions following upward social comparisons

The research in this thesis focused on envy as an emotion that arises after an upward social comparison. Another emotion that can arise in these situations is admiration, which also received some attention in Chapters 2

and 4. Based on the current research, a model (Figure 7.1) is proposed that describes when each type of envy or admiration is likely to be elicited.

The model starts from a point at which someone is better than oneself in something important. After all, if the domain is not important, there is also no upward comparison (someone who is better at lying on a couch does not trigger an upward comparison). Then, the domain is evaluated on how important it is to oneself. If it is not, admiration is likely to result. When Dutch swimmer Pieter van den Hoogenband won an Olympic gold medal in 2004, I admired him. His outstanding performance was definitely important, but it was not something that was important for my self view. Note that this step in the model has not yet been tested, but I predict that important achievements that do not reflect upon oneself will trigger admiration.

When the domain in which one is outperformed is also important for oneself, the deservingness of the situation is then appraised. If the situation is perceived to be undeserved, malicious envy is likely to result. In the current thesis it was found that malicious envy can lead to action tendencies aimed at pulling down the superior other, but also to social differentiation (a motivation to do better in another domain). When each of these action tendencies is elicited is yet unclear, but it likely depends on the opportunities that exist for negative behavioral responses and improvement in another domain, as well as the costs associated with them.

When one is outperformed in a domain important to oneself, and the situation is perceived to be deserved, the perceived controllability of the situation is assessed. If the situation is perceived to be attainable for oneself, benign envy with its action tendencies aimed at improving oneself is likely to result. If the situation is perceived to be unattainable or very difficult to attain, admiration is more likely as a "self-surrendering" response. Even though the domain in which one is outperformed is important, a person who admires another feels good about the accomplishment of the other and this prevents it from reflecting bad upon the admirer. Because attainability does not appear to matter for malicious envy, it is expected that the appraisal of deservingness occurs before that of attainability. Although this is speculative, it is consistent with the idea that appraisals are sequentially made. As Scherer (2001, p. 377) stated "logically, coping potential cannot be

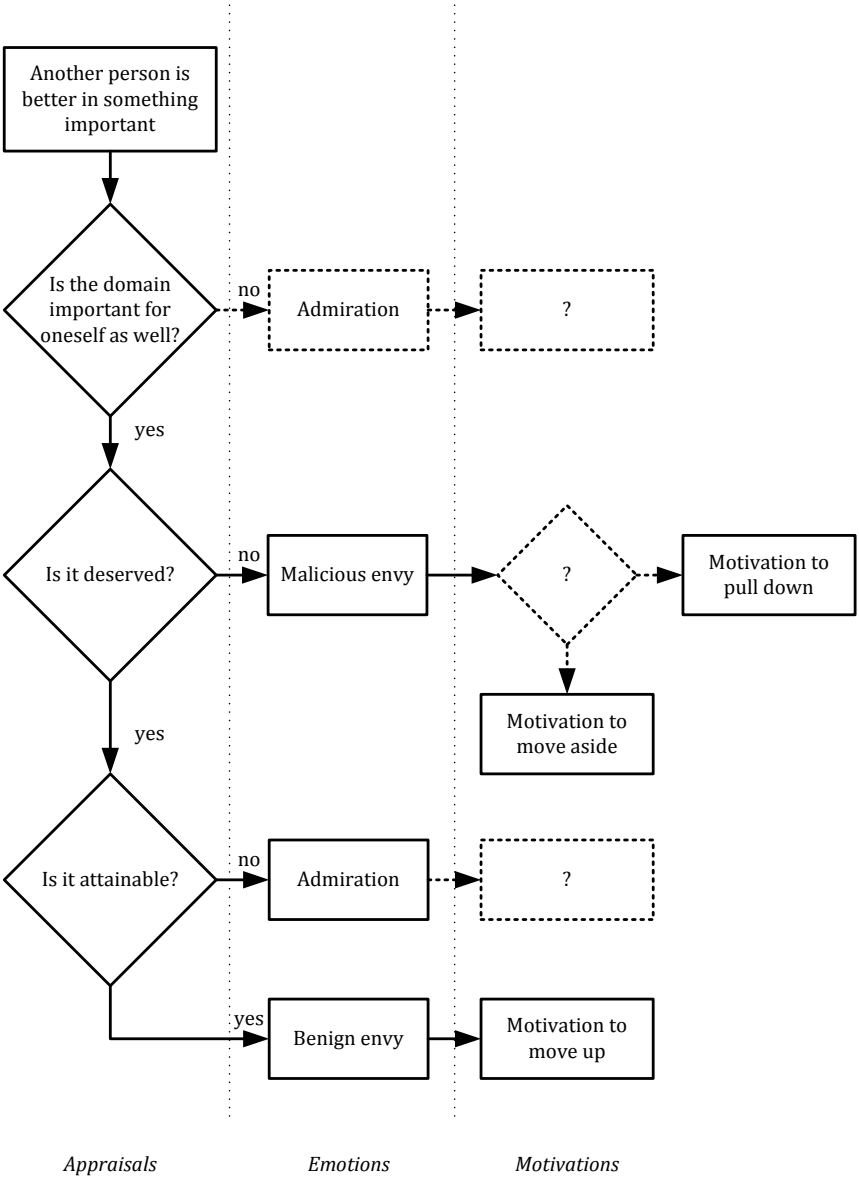

Figure 7.1 Emotional Experiences and Associated Motivations after Being Outperformed

Note. Untested steps in the model are presented by dashed lines.

conclusively evaluated until one has determined ... the nature of the responsible agent and its power." According to Scherer's ideas, an appraisal of deservingness that is purely an evaluation of the situation at hand, is likely to be quicker than one of control potential that also needs information on previous experiences a person had in attempts to attain certain goals.

A final question that remains open in the model is what admiration leads to. From a functional perspective of emotions, admiration, like any emotion, has a function (Keltner & Gross, 1999; Zeelenberg & Pieters, 2006). Algoe and Haidt (2009) found that admiration leads to inspiration, but the research in this thesis found that it does not improve performance. This apparent discrepancy might be caused by the general function positive emotions have. Positive emotions broaden a persons repertoire in actions, while negative emotions lead to more specific actions (Fredrickson, 2001). This could explain why benign envy influences behavior directly, while admiration might do so more indirectly. If admiration indeed exists if an outstanding performance of another person is deserved but unattainable, broadening one's perspective for achievement seems helpful. After all, trying to achieve the same performance would not be beneficial as it was already evaluated as unattainable. A focus on new possible routes toward status might help the individual. Another option is that admiration enhances the bond with the other (Algoe & Haidt, 2009). Being near the superior person can also enhance the status of the one who admires, this is why people bask in the reflected glory of others (Cialdini et al., 1976). The action tendencies that are part of admiration have not been studied directly though, so these ideas remain speculative.

Doing envy research

This chapter answered some questions people typically ask regarding envy based on the empirical work in this thesis. This section provides a few insights gained during this research, that may help people who want to further explore the fascinating topic of envy.

Eliciting envy. What is envied clearly varies between persons. It can therefore be difficult to create one situation that elicits envy in all participants. This thesis provides a few ways; an iPhone elicits envy, when

someone gets €5 while another gets nothing the better off think that the worse off will be envious (and they are likely to be), and via emotion recall tasks. In the Netherlands the two types of envy can be elicited by asking participants to recall an instance of either type, but in languages where only one word exists it is more difficult. One option is to have participants recall instances of envy, and classify them as either benign envy or malicious envy, but another way is to steer them in that direction by including the appraisal of deservingness; that they felt envy for something that felt undeserved (malicious envy) or deserved (benign envy). Note that when participants were asked to recall an instance of envy in this thesis, I generally added in the instruction that envy is a common emotion that everyone experiences once in a while. This helps to prevent some people from saying that they have never experienced envy.

Measuring envy. Measuring envy can be difficult because people do not like to admit that they are envious. In the current thesis I circumvented this on a few occasions by asking participants whether they were somewhat jealous. This is generally looked upon less negatively, and people have less trouble admitting they are jealous (Foster, 1972).

The results in the current thesis also clearly show that it is important to distinguish between the two types of envy when one measures envy, as the resulting behavior differs. In the Dutch language (but also in some others) two separate words can be used to measure benign or malicious envy, but this is not possible in other languages. In these languages, it might be useful to use questions from the experiential content of the types of envy without asking for envy itself (those used in Study 2.3 seem especially helpful). This also helps to avoid the problem that people do not like to admit being envious as envy is assessed more indirectly (this could also be a reason to use questions that measure the experiential content in languages that do have separate words for the types of envy).

Measuring the tendency to experience envy. The scale that measures the dispositional tendency to experience envy (Smith et al., 1999) does not contain questions that tap into benign or malicious envy, but it provides more of a generalized measure of envy. The current research finds that to be able to predict behavior, one does not only need to know whether someone

is envious, but rather whether someone is benignly or maliciously envious. In future research questions could be added to the dispositional tendency to experience envy, to see whether it indeed matters whether a person is dispositionally benignly envious or dispositionally maliciously envious. Another option is to use the existing envy measure together with a dispositional tendency to find things (un)deserved (such as entitlement, Campbell et al. 2004), and expect different envy effects for people who generally find things to be deserved than for those who do not.

Conclusion

In this thesis the bright side of the deadly sin of envy is brought to the light. Three potentially positive effects of envy are documented in empirical research. First, people who are benignly envious (the type that exists when people perceive the advantage of the other to be deserved) are motivated to attain the coveted asset for themselves and actually perform better as a result. Second, the maliciously envious usually behave negatively toward the envied by acting on motivations aimed at pulling down the superior person, but another option is to "move aside". The maliciously envious are frustrated by the fact that another person has something attractive, but can also try to resolve this via social differentiation. This means that they become motivated to gain something else, and that even though they are worse off on one dimension, they can actually perceive themselves to be better off on another dimension. The third bright side is found in the consequences of being envied. People who fear that they might be maliciously envied, will act more prosocial as a result. By doing so, the envied can keep high status places in the group, while those low in status (the envious) are compensated for being low in status by the increased helping behavior of the envied. All in all, the current thesis shows that envy is not always the deadly sin it is often supposed to be, and that it certainly has its bright sides. Or, as Aristotle (350BC/1954) already said "ambitious men are more envious than those who are not".

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Summary of Results

This summary provides an overview of the empirical findings in all the chapters of this thesis. For a more thorough discussion and reflection on the findings, see Chapter 7.

Chapter 2. Leveling up and down: The experiences of benign and malicious envy

The first empirical chapter of this thesis examines whether different types of envy exist. If envy is caused by another person being better off, two main action tendencies are likely to exist to relieve one from the frustrating envious experience: one can either try to pull down the envied other, or one can try to move up to the better position oneself. Where earlier philosophical and psychological work discussed the possibility that different types of envy might exist (Elster, 1991; Foster, 1972; Kant, 1780/1997; Neu, 1980; Parrott, 1991; Rawls, 1971; Smith, 1991; Taylor, 1988), the various distinctions made differed from each other and were never empirically tested. Furthermore, much of the seminal work on envy assumes that only this malignant form of envy is actually envy. For example, Schoeck (1969) thought that a constructive component of envy would arise when people realize that they are envious, but that the experience then seizes to be envy. In two recent reviews on the topic of envy, it was also concluded that only the malicious form of envy should be considered "envy proper" (Miceli & Castelfranchi, 2007; Smith & Kim, 2007). However, because these assumptions had not been tested, and because I did not think it was likely that the two very different action tendencies of becoming motivated and becoming malignant would result from exactly the same experience, this idea was tested in three studies. If envy can be both constructive and destructive, it is obviously important to understand how these different behavioral effects might occur.

In the first study the possible distinction between envy types was tested in the Netherlands, where two different words exist for envy, namely *benijden* and *afgunst* (which I refer to as *benign envy* and *malicious envy* from now on). More languages have two words that translate into envy, and

it seems that in all these languages one appears to be a more positive experience and the other a more negative one. To examine the experience of the emotion, it is best to investigate the experiential content of the emotion, which consists of the feelings, thoughts, action tendencies, actions and emotivational goals that are all part of an emotion (Roseman et al., 1994). Participants recalled an instance in which they were benignly envious, were maliciously envious, admired another person, or resented another person. After doing so, they rated questions related to the experiential content of the emotion. Analysis clearly showed that all four experiences differed from each other; benign and malicious envy are thus separate experiences, but they also differ from admiration and resentment. Both types felt rather frustrating, but benign envy led to a desire to improve the own situation, while malicious envy led to a desire to degrade the other (the full differences in experience can be found in Table 2.3).

In Studies 2.2 and 2.3 these findings were extended by investigating the experience of envy in two countries that have only one word for envy, the U.S. and Spain. Study 2.2 was similar as Study 2.1, but participants always recalled an instance in which they were envious (instead of benignly or maliciously envious). In Study 2.3 participants registered every day for a period of two weeks whether they had experienced *envidia* that day and if they had, they rated that experience on a number of questions. This way, the experience was always measured on the same day, preventing potential effects of a recall bias. In both these studies a latent class analysis found that two classes of responses existed, that closely resembled the distinction between benign and malicious envy that was found in the Netherlands. Even though some countries thus have only one word for envy, people there still clearly experience the two types of envy; one benign aimed at moving up oneself and one malicious aimed at pulling down the other.

Chapter 3. The appraisals of benign and malicious envy

The goal of the research presented in Chapter 3 was to examine what determines whether benign or malicious envy will result. Specific emotions are elicited by specific patterns of appraisals (Frijda, 1993; Roseman et al., 1996). An appraisal is a perception of the situation at hand, and in the

timeline of an emotion these appraisals lead to the experience, which influences the subsequent behavior. Based on Chapter 2, I examined in Study 3.1 whether the situations of benign and malicious envy are appraised to be different on the perceived deservingness of the advantage the superior other has, and on the perceived control potential a person has to improve his or her own situation. As expected, participants recalling an experience of malicious envy had appraised the advantage of the other to be more undeserved and to be lower in control potential than those who recalled an experience of benign envy.

In a second study these two appraisals were manipulated, to test whether they indeed influenced the type of envy that was experienced. Participants read a scenario study in which they imagined being outperformed at work, which varied in the deservingness of the situation and the degree to which the participant could try to improve his or her own situation. As expected, the manipulations had no influence on the overall intensity of the envy, but did influence the type of envy that was experienced. The more undeserved the situation was, the more the participants indicated that they would be maliciously envious instead of benignly envious. The perceived control potential had no effect on malicious envy, but did influence the experience of benign envy (the more a person perceived the situation to be under his or her control, the more benign envy was experienced). Deservedness had the strongest effect, and thus appears to be the key factor that determines whether benign or malicious envy exists; the more undeserved the advantage of the superior other is, the more malicious envy is likely to occur. The more deserved, the more benign envy is likely to occur.

Chapter 4. When and why envy outperforms admiration

In the previous chapters the experience of benign and malicious envy, and the appraisals that elicit them have been identified. However, so far I only found that a motivation to do better is part of the experience of benign envy, but actual performance following benign envy had not yet been studied. Chapter 4 tested whether experiencing benign envy indeed leads to an increased performance. The effects of benign envy are compared to those

of admiration, as people generally believe admiration to be a motivating force. Based on research on social comparisons that shows that upward comparisons only motivate when they trigger some frustration (a "no pain, no gain"-principle, Johnson & Stapel, 2007a), I predicted that admiration would not improve performance, but benign envy would.

Participants who were benignly envious indeed planned to spend more hours studying in the upcoming semester (Study 4.1) and actually performed better on an intelligence task (Study 4.2 and 4.3), compared to participants who admired someone, were maliciously envious, or were in a neutral control condition. Experiencing benign envy thus indeed improves performance. In a fourth study, I find that when a person is confronted with a superior other, the typical benignly envious response only occurs when a person thinks changing one's behavior is doable, not when it is thought to be difficult. Furthermore, a fifth study finds that when participants were cognitively busy (they tried to remember a difficult pattern of circles) they always showed the benignly envious response of improved performance, regardless of whether they thought changing one's behavior was easy or difficult. This suggests that the benignly envious response is the default response to being outperformed, and only when improvement is difficult this response is mutated into one of admiration. Admiration is therefore considered to be more of a secondary response following from an upward social comparison. Or, as the philosopher Kierkegaard (1849/2008) stated, envy is unhappy self-assertion, while admiration is happy self-surrender.

Chapter 5. The envy premium: How possession by others increases the value of a product

A common idea in consumer research is that people try to "keep up with the Joneses"; they generally want to have what their neighbors (or close others) have (Frank, 1999). However, this phenomenon is merely descriptive, as it states that people try to keep up with others. But why do they do so? One reason might be envy, that is thought to stimulate consumption. The large advertising agency Young and Rubicam (2006) claims that they can stimulate the sales of a product by increasing the envy potential of a product. No empirical studies that I am aware of studied this,

and the distinction between benign and malicious envy is likely to be of importance here. After all, with benign envy people try to move up to the position of the person who is better off and are therefore likely to want the product that the envied person has more. For malicious envy, however, this is not expected to be the case.

This is indeed what the results of three studies show. Participants who were benignly envious of a fellow student who owned an iPhone (envy was inducted via a scenario or via a video of a confederate) were willing to pay more for the iPhone (an "envy premium"), but those who were maliciously envious were not. However, a third study did find that the maliciously envious were willing to pay more for a BlackBerry in an attempt to resolve the frustration of being inferior by "social differentiation". By becoming motivated to do better than the envied person in a related but different domain, the envious could feel satisfied again. Thus, in the consumer domain, the benignly envious try to move up to the position of the envied person by buying the same product the envious person has (the classical keeping-up-with-the-Joneses idea), while the maliciously envious try to move away from them by buying a different but related product.

Chapter 6. Warding off the evil eye: When the fear of envy increases prosocial behavior

In the final empirical chapter a different perspective is taken, and I investigate the behavior of a person who thinks that he or she is envied by another person. If envy can be so destructive as much earlier research found it to be (Smith & Kim, 2007), it seems plausible that certain reactions to deal with this exist. After all, when one outperforms another person and therefore expects this other person to become envious and hostile as a result, it seems wise to attempt to prevent this hostility.

In two experiments participants who were endowed with €5 while another participant was not, acted more prosocially afterwards. In Study 6.1 the participants who could be maliciously envied because their advantage was undeserved, helped to pick up erasers the confederate dropped more often than those in a control group. In Study 6.2 the potentially maliciously envied gave time-consuming advice to the other person longer than those in

the control group, or those of whom the advantage was deserved (making it likely that the other would be benignly envious). Furthermore, participants who could be maliciously envied only helped the potentially envious person more, not another person.

A covariance analysis confirmed that the effect on helping was caused by a fear of envy, and not because they felt guilty, felt obliged to because they were better, because the other might feel threatened, or because of inequality aversion. It is concluded that the fear of envy and the resulting prosocial behavior helps to foster group cohesion. Without the helping behavior, people low in status would be likely to leave the group or to act maliciously, which would be negative for both the envious and the envied.

Conclusion

To summarize, the research presented in this thesis found three positive effects of envy. First, benign envy motivates people to attain more for themselves, it helps them to *move up*. Second, malicious envy does not necessarily lead to negative behavior toward the envied, it can also motivate people to do better than the envied on alternative aspects, to *move-aside*. Finally, people become more prosocial when they fear that others are (maliciously) envious of them. This thesis thus provides a new, brighter view on the deadly sin of envy; given all these potential positive effects, envy seems not so deadly after all.

Samenvatting

Afgunst is negatief. Het is het pijnlijke gevoel dat kan ontstaan als een ander beter af is dan wijzelf. Deze veel voorkomende emotie is zo negatief, dat het in veel grote religies wordt afgekeurd; het is bijvoorbeeld een van de zeven doodzondes in de katholieke traditie. Veel onderzoek laat inderdaad zien dat mensen die afgunst ervaren zich ook daadwerkelijk negatief gedragen naar de persoon op wie ze afgunstig zijn. Het afgunstige gedrag kan variëren van vrij mild (roddelen) tot vrij extreem (mensen blijken zelfs bereid zelf geld op te geven, als ze daarmee geld kunnen vernietigen van de ander). Klassieke filosofen, oude religies, en recentelijk dus ook wetenschappers bevestigen hetzelfde idee: afgunst is negatief (Smith & Kim, 2007).

Emotie-onderzoek in de psychologie schetst echter een complexer beeld van emoties. Emoties zijn belangenbehartigers (Frijda, 1986). Zo voelt boosheid negatief en kan het inderdaad tot negatief gedrag leiden, maar het heeft wel degelijk een functie. Je wordt boos als je het gevoel hebt bewust benadeeld te worden door een ander. Boosheid zet je ertoe aan om hier tegen in te gaan en op te komen voor jezelf. Boosheid helpt dus om doelen te bereiken en heeft daardoor een duidelijk positieve kant.

Net zoals andere emoties, is afgunst ook een belangenbehartiger. Afgunst ontstaat bij een bedreiging van relatieve status, die ontstaat als een ander het beter doet in een domein dat belangrijk is voor iemands zelfbeeld. Veel onderzoek laat zien dat de acties waartoe afgunst leidt gericht zijn op het neerhalen van die ander, om zo de bedreiging voor relatieve status op te heffen (Wert & Salovey, 2004). Echter, er is een andere manier om de frustratie die ontstaat als een ander het beter doet te verhelpen: Je kan zelf ook proberen de betere positie van de ander te bereiken. In het huidige proefschrift onderzocht ik deze meer positieve kant van afgunst.

De ervaring van afgunst en benijden

In Hoofdstuk 2 stelde ik de hypothese dat er eigenlijk twee soorten *envy* zijn. Het Engelse woord voor afgunst, *envy*, kan in het Nederlands ook vertaald worden met het woord benijden. In de eerste studie laat ik zien dat afgunst en benijden daadwerkelijk verschillende ervaringen zijn. Een deel

van de proefpersonen herinnerde zich een situatie waarin ze afgunstig waren, een ander deel een situatie waarin ze iemand benijdden. Daarna beantwoordden ze een serie vragen over die situatie. Hoewel de twee types *envy* in veel gevallen op elkaar lijken, blijkt dat over het hele spectrum van de emotie (van hoe het aanvoelt tot het gedrag waar het toe leidt) ze duidelijk onderscheiden kunnen worden. Zowel afgunst als benijden voelen frustrerend, maar waar afgunst mensen aanzet tot gedrag gericht op het neerhalen van de ander, leidt benijden juist tot een positievere motivatie gericht op het verbeteren van de eigen positie.

Om te laten zien dat dit niet alleen een typisch Nederlands fenomeen is, zijn in twee andere culturen studies uitgevoerd. In zowel de Verenigde Staten (*envy*) als in Spanje (*envidia*) bestaat er maar één woord voor de twee types. Net zoals in de eerste studie beschreven proefpersonen een situatie waarin ze de emotie voelden, waarna ze vragen erover beantwoordden. Hoewel er dus maar één woord voor de twee types bestaat in die talen, kon via statistische analyse duidelijk een onderscheid gemaakt worden. Ongeveer de helft van de mensen beschreef een ervaring van afgunst, terwijl de andere helft een ervaring van benijden beschreef. Hoewel er eerder reeds gespeculeerd is over de mogelijkheid dat *envy* tot een motivatie kan leiden om jezelf te verbeteren (Kant, 1780/1997, Neu, 1980, Parrot, 1991, Rawls, 1971, Smith, 1991) waren de ideeën over hoe dit gebeurde nogal verschillend en waren ze nog niet empirisch getoetst. Het huidige onderzoek is het eerste dat laat zien dat *envy* daadwerkelijk motiverend kan zijn en verklaart tevens waarom dit gebeurt.

Wanneer afgunst, wanneer benijden?

In Hoofdstuk 3 is gekeken naar wat nu bepaalt welk type *envy* iemand voelt als een ander beter af is. Het maakt duidelijk uit of je een ander benijdt of dat je afgunstig bent, aangezien het ene tot constructieve motivaties leidt en het andere tot destructieve. Emoties ontstaan door een bepaald patroon van percepties van de situatie (Frijda, 1993, Roseman et al, 1996). Dit soort interpretaties noemen we *appraisals*, Het eerste onderzoek in dit hoofdstuk laat zien dat de belangrijkste appraisal die bepaalt of afgunst of benijden ontstaat de verdiendheid van de situatie is: Als je het gevoel hebt dat het

onverdiend is dat de ander beter af is, ontstaat afgunst. Als je het gevoel hebt dat het verdiend is, ontstaat benijden. In de tweede studie blijkt dat door de mate van verdiendheid te manipuleren inderdaad het type envy dat ervaren wordt door een proefpersoon verandert.

Waarom het beter is te benijden dan te bewonderen

Nadat iemand zich vergelijkt met een ander die het beter doet, blijkt het de emotie benijden te zijn die aanzet tot een motivatie tot verbetering. Het was echter nog niet onderzocht of dit ook tot daadwerkelijk betere prestaties leidt. Bovendien denken veel mensen dat het juist bewonderen is dat mensen aanzet tot gedragsverbetering. De eerste drie studies in dit hoofdstuk bevestigen duidelijk het idee dat het benijden is dat motiveert, en niet bewonderen. Proefpersonen die iemand benijdden raakten gemotiveerd om meer tijd aan hun studie te willen besteden, terwijl proefpersonen die iemand bewonderden of die afgunstig waren dit niet deden. Nog belangrijker, ze presteerden ook daadwerkelijk beter op een intelligentietest. Het benijden van iemand vergroot dus direct de motivatie en prestatie, terwijl iemand bewonderen dat niet doet.

Een interessante vraag is wat er gebeurt als iemand een ander benijdt, maar er geen mogelijkheid bestaat om zichzelf te verbeteren. In deze situatie voelt iemand het frustrerende benijden, maar biedt de actieneiging om jezelf te verbeteren geen mogelijkheid om dit frustrerende gevoel op te lossen en is het ervaren van benijden niet effectief. Daarom voorspelde ik dat als men iemand benijdt, maar de situatie als moeilijk te verbeteren wordt gezien, het benijden automatisch verandert in bewonderen. Dit is precies wat gevonden is nog twee studies. De laatste studie laat bovendien zien dat de eerste reactie op de betere prestatie van een ander benijden is, en pas als de situatie als moeilijk te veranderen wordt ingeschat verandert het in bewonderen.

De rol van afgunst en benijden in consumptie

Envy wordt vaak gerelateerd aan consumptie. Zo stelt het marketing en communicatieburo Young and Rubicam dat producten die *envy* op weten te roepen beter verkopen. Hoewel dit plausibel klinkt, is dit nog nooit

daadwerkelijk onderzocht. Bovendien beschouwden onderzoekers *envy* ook duidelijk als iets negatiefs, waardoor deze stimulerende kant genegeerd werd. Het onderscheid tussen benijden en afgunst kan ook in de studie van consumentengedrag nieuwe inzichten verschaffen. De voorspelling was dat mensen meer willen betalen voor een aantrekkelijk product dat een ander ook heeft, als ze die persoon benijden.

Drie studies bevestigen deze hypothese. Proefpersonen die zich inbeeldden afgunstig te zijn op een ander die een iPhone bezit waren niet bereid meer te betalen voor dit product, terwijl proefpersonen die deze persoon benijdden dit wel waren. In de laatste twee studies van dit hoofdstuk zagen de proefpersonen een video van een student die enthousiast over zijn iPhone vertelde en daarmee *envy* kon opwekken. In de versie waarin het verdiend was dat hij deze telefoon had omdat hij er hard voor gewerkt had (*benijden*) wilden de proefpersonen ook meer betalen voor een iPhone, in een versie waarin het onverdiend was dat hij zo'n mooie telefoon had omdat dit "één van de dingen was die hij altijd van zijn vader kreeg" (*afgunst*) wilden de proefpersonen er niet meer voor betalen.

In deze laatste studie bleek tevens dat afgunstige proefpersonen wel meer wilden betalen voor een BlackBerry, een telefoon met een zakelijkere uitstraling vergeleken met de ietwat frivole iPhone. De reden hiervan is dat afgunst nog steeds tot een frustratie leidt, die ontstaat doordat de ander meer heeft dan je zelf hebt. Door een BlackBerry te kopen kan de afgunstige persoon de frustratie verminderen die ontstaat doordat de ander de mooie iPhone heeft. In de sociale vergelijkingsliteratuur noemt men dit *sociale differentiatie* (Lemaine, 1974). Als het niet lukt om het verschil te verkleinen in het domein waarin de ander beter is, zoek je naar een ander domein waarin je zelf beter kan zijn. Voor consumenten leidt benijden er dus toe dat ze meer willen betalen voor het product dat het benijden oproept, terwijl afgunst ertoe leidt dat ze meer willen betalen voor een ander (maar gerelateerd product) om zichzelf te onderscheiden van de ander.

De angst voor afgunst leidt tot sociaal gedrag

In dit laatste empirische hoofdstuk verander ik van perspectief. In plaats van de gevolgen van afgunst en benijden, werd onderzocht hoe

mensen zich gedragen als anderen afgunstig op hen kunnen zijn, of hen zouden kunnen benijden. Als afgunst inderdaad zo destructief is als veel eerder onderzoek heeft gevonden (Smith & Kim, 2007), dan is het waarschijnlijk dat er (automatische) mechanismes bestaan die helpen dit te voorkomen.

In twee studies kreeg de proefpersoon telkens €5, terwijl een andere proefpersoon dit niet kreeg. Als deze verdeling onverdiend was, was het waarschijnlijk dat de ander afgunstig kon zijn. In deze situatie bleek dat, zoals voorspeld, de proefpersoon zich socialer opstelde en de ander meer hielp (in de eerste studie door een stapel gummetjes op te rapen die de mogelijk afgunstige persoon liet vallen, in de tweede studie door de ander meer en langer te helpen bij het beantwoorden van een serie vragen). Proefpersonen voor wie het verdiend was dat ze €5 kregen terwijl de ander niets kreeg (en dus waarschijnlijk benijdt werden), hielpen de ander niet meer. Statische analyses laten zien dat het gedrag inderdaad de angst voor afgunst was die leidde tot het socialere hulpgedrag, en dat het niet ontstond door bijvoorbeeld schuld of een algemene aversie tegen ongelijkheid.

Conclusie

Het onderzoek in dit proefschrift vindt drie positieve effecten van *envy*. Allereerst leidt benijden ertoe dat mensen gemotiveerd raken en beter hun best gaan doen om zelf ook het gewenste doel te bereiken. Ten tweede kan afgunst, dat vaak tot negatief gedrag leidt, er ook toe leiden dat mensen zich willen differentiëren van de ander, en daardoor beter willen zijn in een alternatief domein. Tenslotte leidt de angst voor afgunst ertoe dat mensen die beter af zijn dan anderen zich socialer gedragen. Dit proefschrift schetst hiermee een zonniger beeld van de doodzonde afgunst.

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Curriculum Vitae

Niels van de Ven was born in 1979 in picturesque Eersel. After receiving a HAVO diploma at the Rythoviuscollege there, he moved to Eindhoven to pursue a bachelor's degree in Business Engineering at the Fontys Hogescholen. He graduated there in 2001, after which he enrolled at Tilburg University to study Social and Economic Psychology. During his second year he got hooked to academia when he started doing research projects with Marcel Zeelenberg. In the final year of his study he visited Tom Gilovich at Cornell University, and this inspiring visit strengthened his interest for science. He graduated cum laude in Tilburg in 2005 and started to work as a PhD student with Marcel Zeelenberg and Rik Pieters. After finishing his thesis "The bright side of a deadly sin: The psychology of envy", Niels now works as an assistant professor at Tilburg University. His research interests include emotions, decision making, and consumer behavior.

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